

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 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 March 31, 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: 001-35375

Zynga Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

42-1733483

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

699 Eighth Street

San Francisco, CA

(Address of principal executive offices)

94103

(Zip Code)

(855) 449-9642

(Registrant's telephone number, including area code)

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 Exchange Act Rule 12b-2). Yes No

As of April 15, 2019, there were 935,282,782 shares of the Registrant's Class A common stock outstanding.

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock	ZNGA	Nasdaq Global Select Market

Zynga Inc.
Form 10-Q Quarterly Report
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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Quarterly Report on Form 10-Q contains forward looking statements reflecting our current expectations that involve risks and uncertainties. These forward-looking statements include, but are not limited to, statements related to industry prospects, our future economic performance including anticipated revenues and expenditures, results of operations or financial position, and other financial items, our business plans and objectives, including our growth strategies and intended product releases, and may include certain assumptions that underlie the forward-looking statements. Forward-looking statements often include words such as “outlook,” “projected,” “intends,” “will,” “anticipate,” “believe,” “target,” “expect,” and statements in the future tense are generally forward-looking.

We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. The achievement or success of the matters covered by such forward-looking statements involves significant risks, uncertainties and assumptions, including those described in “Part II. Item 1A. Risk Factors” of this Quarterly Report on Form 10-Q. Moreover, we operate in a very competitive and rapidly changing environment and industry. New risks may also emerge from time to time. It is not possible for our management to predict all of the risks related to our business and operations, 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 materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this Quarterly Report on Form 10-Q may not occur and actual results could differ materially and adversely from those anticipated, predicted or implied in the forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur, and reported results should not be considered as an indication of future performance. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

Except as required by law, we undertake no obligation to update any forward-looking statements for any reason to conform these statements to actual results or to changes in our expectations.

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Zynga Inc.
Consolidated Balance Sheets
(In thousands, except par value)
(Unaudited)

	March 31, 2019	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 199,725	\$ 544,990
Short-term investments	46,694	36,232
Accounts receivable, net of allowance of \$0 at March 31, 2019 and December 31, 2018	147,958	91,630
Restricted cash	35,006	35,006
Prepaid expenses	29,384	26,914
Other current assets	20,506	12,505
Total current assets	479,273	747,277
Long-term investments	5,972	—
Goodwill	1,471,365	934,187
Intangible assets, net	285,146	118,600
Property and equipment, net	268,101	266,557
Right-of-use assets	19,042	—
Restricted cash	30,018	—
Prepaid expenses	29,108	30,774
Other non-current assets	64,101	49,308
Total assets	\$ 2,652,126	\$ 2,146,703
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 14,917	\$ 26,811
Income tax payable	5,633	4,895
Deferred revenue	285,953	191,299
Debt	100,000	100,000
Operating lease liabilities	9,056	—
Other current liabilities	257,240	156,829
Total current liabilities	672,799	479,834
Deferred revenue	1,014	1,586
Deferred tax liabilities, net	35,119	16,087
Non-current operating lease liabilities	20,098	—
Other non-current liabilities	181,367	52,586
Total liabilities	910,397	550,093
Stockholders' equity:		
Common stock (Class A), \$0.00000625 par value, and additional paid in capital - authorized shares: 2,020,517; shares outstanding: 932,490 shares as of March 31, 2019 and 861,111 as of December 31, 2018	3,782,693	3,504,713
Accumulated other comprehensive income (loss)	(111,462)	(118,439)
Accumulated deficit	(1,929,502)	(1,789,664)
Total stockholders' equity	1,741,729	1,596,610
Total liabilities and stockholders' equity	\$ 2,652,126	\$ 2,146,703

See accompanying notes to consolidated financial statements.

Zynga Inc.
Consolidated Statements of Operations
(In thousands, except per share data)
(Unaudited)

	Three Months Ended March 31,	
	2019	2018
Revenue:		
Online game	\$ 200,164	\$ 161,553
Advertising and other	65,239	46,679
Total revenue	265,403	208,232
Costs and expenses:		
Cost of revenue	121,643	69,042
Research and development	161,880	60,825
Sales and marketing	102,011	50,855
General and administrative	21,504	23,253
Total costs and expenses	407,038	203,975
Income (loss) from operations	(141,635)	4,257
Interest income	443	1,810
Other income (expense), net	2,112	3,401
Income (loss) before income taxes	(139,080)	9,468
Provision for (benefit from) income taxes	(10,252)	3,859
Net income (loss)	\$ (128,828)	\$ 5,609
Net income (loss) per share attributable to common stockholders:		
Basic	\$ (0.14)	\$ 0.01
Diluted	\$ (0.14)	\$ 0.01
Weighted-average common shares used to compute net income		
(loss) per share attributable to common stockholders:		
Basic	926,230	869,627
Diluted	926,230	893,774

See accompanying notes to consolidated financial statements.

Zynga Inc.
Consolidated Statements of Comprehensive Income (Loss)
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2019	2018
Net income (loss)	\$ (128,828)	\$ 5,609
Other comprehensive income (loss):		
Change in foreign currency translation adjustment	6,963	23,134
Net change in unrealized gains (losses) on available-for-sale marketable debt securities, net of tax	14	(27)
Other comprehensive income (loss), net of tax	6,977	23,107
Comprehensive income (loss)	\$ (121,851)	\$ 28,716

See accompanying notes to consolidated financial statements.

Zynga Inc.
Consolidated Statements of Stockholders' Equity
(In thousands)

	Class A Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount					
Balances at December 31, 2018	<u>861,111</u>	<u>\$ 5</u>	<u>\$ 3,504,708</u>	<u>\$ —</u>	<u>\$ (118,439)</u>	<u>\$ (1,789,664)</u>	<u>\$ 1,596,610</u>
Exercise of stock options and ESPP	5,097	—	5,304	—	—	—	5,304
Vesting of ZSUs, net of tax withholdings	2,487	—	—	(11,010)	—	—	(11,010)
Acquisition-related common stock issuance	63,795	1	253,902	—	—	—	253,903
Stock-based compensation expense	—	—	18,773	—	—	—	18,773
Retirements of treasury stock	—	—	—	11,010	—	(11,010)	—
Net income (loss)	—	—	—	—	—	(128,828)	(128,828)
Other comprehensive income (loss)	—	—	—	—	6,977	—	6,977
Balances at March 31, 2019	<u>932,490</u>	<u>\$ 6</u>	<u>\$ 3,782,687</u>	<u>\$ —</u>	<u>\$ (111,462)</u>	<u>\$ (1,929,502)</u>	<u>\$ 1,741,729</u>

	Class A, B and C Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount					
Balances at December 31, 2017	<u>870,660</u>	<u>\$ 5</u>	<u>\$ 3,426,500</u>	<u>\$ —</u>	<u>\$ (93,497)</u>	<u>\$ (1,691,768)</u>	<u>\$ 1,641,240</u>
Exercise of stock options and ESPP	1,510	—	3,311	—	—	—	3,311
Vesting of ZSUs, net of tax withholdings	2,748	—	—	(6,364)	—	—	(6,364)
Stock-based compensation expense	—	—	14,113	—	—	—	14,113
Repurchases of common stock	(11,306)	—	—	(41,175)	—	—	(41,175)
Retirements of treasury stock	—	—	—	47,539	—	(47,539)	—
Adoption of ASU 2014-09	—	—	—	—	—	4,024	4,024
Net income (loss)	—	—	—	—	—	5,609	5,609
Other comprehensive income (loss)	—	—	—	—	23,107	—	23,107
Balances at March 31, 2018	<u>863,612</u>	<u>\$ 5</u>	<u>\$ 3,443,924</u>	<u>\$ —</u>	<u>\$ (70,390)</u>	<u>\$ (1,729,674)</u>	<u>\$ 1,643,865</u>

Zynga Inc.
Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2019	2018
Cash flows from operating activities:		
Net income (loss)	\$ (128,828)	\$ 5,609
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	21,080	7,731
Stock-based compensation expense	18,773	14,113
(Gain) loss from foreign currency, sales of investments, assets and other, net	154	1,951
(Accretion) and amortization on marketable debt securities, net	(153)	(549)
Noncash lease expense	1,449	—
Change in deferred income taxes and other	(20,374)	1,322
Changes in operating assets and liabilities:		
Accounts receivable, net	(30,001)	10,682
Prepaid expenses and other assets	3,318	(4,786)
Accounts payable	(14,293)	(9,574)
Deferred revenue	86,474	11,234
Income tax payable	(5,361)	(5,004)
Operating lease and other liabilities	69,309	(36,676)
Net cash provided by (used in) operating activities	1,547	(3,947)
Cash flows from investing activities:		
Purchases of investments	(29,756)	(124,822)
Maturities of investments	8,500	160,000
Sales of investments	4,987	—
Acquisition of property and equipment	(5,058)	(1,424)
Proceeds from sale of property and equipment	46	25
Business acquisitions, net of cash acquired and restricted cash held in escrow	(299,357)	—
Release of restricted cash escrow from business combinations	—	(22,800)
Net cash provided by (used in) investing activities	(320,638)	10,979
Cash flows from financing activities:		
Taxes paid related to net share settlement of stockholders' equity awards	(11,010)	(6,364)
Repurchases of common stock	—	(39,544)
Proceeds from issuance of common stock	4,939	3,311
Repayment of debt	(1,364)	—
Other financing activities, net	(326)	—
Net cash provided by (used in) financing activities	(7,761)	(42,597)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	11,605	1,476
Net change in cash, cash equivalents and restricted cash	(315,247)	(34,089)
Cash, cash equivalents and restricted cash, beginning of period	579,996	405,677
Cash, cash equivalents and restricted cash, end of period	\$ 264,749	\$ 371,588
Noncash investing activity:		
Acquisition-related common stock issuance	\$ 253,903	\$ —
Noncash financing activities:		
Unsettled stock option exercise	\$ 365	\$ —
Unsettled repurchases of common stock	—	1,631

See accompanying notes to consolidated financial statements.

Zynga Inc.
Notes to Consolidated Financial Statements
(Unaudited)

1. Overview and Summary of Significant Accounting Policies

Organization and Description of Business

Zynga Inc. (“Zynga,” “we” or the “Company”) is a leading provider of social game services. We develop, market and operate social games as live services played on mobile platforms, such as iOS and Android, and social networking sites such as Facebook. Generally, all of our games are free to play, and we generate substantially all of our revenue through the sale of in-game virtual items and advertising services. Our operations are headquartered in San Francisco, California, and we have several operating locations in the U.S. as well as various international office locations in North America, Asia and Europe.

We completed our initial public offering in December 2011 and our Class A common stock is listed on the NASDAQ Global Select Market under the symbol “ZNGA.”

Basis of Presentation and Consolidation

The accompanying interim consolidated financial statements are presented in accordance with United States generally accepted accounting principles (“U.S. GAAP”). The interim consolidated financial statements include the operations of the Company and its owned subsidiaries. All significant intercompany balances and transactions have been eliminated in the consolidation.

The accompanying interim consolidated financial statements and these related notes should be read in conjunction with the consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2018.

Unaudited Interim Financial Information

The accompanying interim consolidated balance sheets as of March 31, 2019 and December 31, 2018, the interim consolidated statements of operations, statements of comprehensive income (loss), statements of stockholders’ equity and statements of cash flows for the three months ended March 31, 2019 and 2018 and the notes to interim consolidated financial statements are unaudited. These unaudited interim consolidated financial statements have been prepared in accordance with U.S. GAAP. In management’s opinion, the unaudited interim consolidated financial statements include all adjustments of a normal recurring nature necessary for the fair presentation of the Company’s statement of financial position and operating results for the periods presented. The results for the three months ended March 31, 2019 are not necessarily indicative of the results expected for the full fiscal year or any other future period.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts in the interim consolidated financial statements and notes thereto. Significant estimates and assumptions reflected in the financial statements include, but are not limited to, the estimated average playing period of payers that we use for revenue recognition, useful lives of property and equipment and intangible assets, accrued liabilities, income taxes, the fair value of assets and liabilities acquired through business combinations, contingent consideration obligations, the discount rate used in discounting our operating lease liabilities, stock-based compensation expense and evaluation of recoverability of goodwill, intangible assets, and long-lived assets. Actual results could differ materially from those estimates.

For the three months ended March 31, 2019, we recognized \$0.6 million of online game revenue and income from operations from changes in our estimated average playing period of payers that required adjusting the recognition period of deferred revenue generated in prior periods. Further, we recognized \$0.2 million of online game revenue and income from operations from games that have been discontinued as there is no further performance obligation. These changes in estimates did not impact our earnings per share for the three months ended March 31, 2019. For the three months ended March 31, 2018, we recognized \$0.4 million of online game revenue and income from operations from games that have been discontinued. This change in estimate did not impact our earnings per share for the three months ended March 31, 2018.

Recent Accounting Pronouncements

Issued But Not Yet Adopted

In August 2018, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2018-15, “*Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*”, which aligns the accounting for implementation costs incurred with a cloud computing arrangement accounted for as a service

arrangement with the guidance in *ASC Topic 350-40, Internal-Use Software* to determine which implementation costs should be capitalized. The ASU permits either a prospective or retrospective transition approach and is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. The Company is currently assessing this standard's impact on its consolidated financial statements.

Issued And Adopted

In February 2016, the FASB issued ASU 2016-02, "*Leases (Topic 842)*" ("ASC Topic 842") which requires a lessee to recognize assets and liabilities on the balance sheet for leases with lease terms greater than 12 months. For lessors, accounting for leases remains substantially the same as in prior periods. We adopted ASC Topic 842 on January 1, 2019 using the alternative transition approach provided in ASU 2018-11, "*Leases (Topic 842) – Targeted Improvements*", which allows initial application of the new standard by recognizing a cumulative-effect adjustment on the adoption date.

Adoption Impact – Lessee Accounting

The adoption of ASC Topic 842 on January 1, 2019 resulted in the recognition of right-of-use assets of \$9.1 million, which includes the elimination of our remaining prepaid rent and deferred rent balances, current operating lease liabilities of \$7.6 million and non-current operating lease liabilities of \$12.4 million. The adoption of ASC Topic 842 did not impact our consolidated statement of operations or consolidated statement of cash flows.

ASC Topic 842 also amends the provisions of ASC Topic 420 – *Exit or Disposal Obligations* to eliminate the concept of cease-use lease liabilities and instead, requires companies to evaluate leases for impairment in accordance *ASC 360 – Property, Plant, and Equipment*. Accordingly, upon adoption, we derecognized our \$10.9 million restructuring cease-use liability related to our Q2 2015 restructuring plan and simultaneously recognized an operating lease liability for an equal amount, with no associated right-of-use asset.

As part of the adoption, the new standard allows a number of practical expedients and exemptions. At transition, we elected the following:

- The package of practical expedients, which allows us to carryforward our historical lease classification, assessment of whether a contract is or contains a lease and initial direct costs for any leases that exist prior to adoption of the new standard;
- The practical expedient to not separate non-lease components from the related lease components; and
- The exemption to not apply the balance sheet recognition requirements for leases with a lease term of 12 months or less and instead, expense those costs on a straight-line basis over the lease term, or in the period in which the obligation is incurred, if such costs are variable.

Adoption Impact – Lessor Accounting

There was no impact to our financial statements as a result of adopting ASC Topic 842. ASU 2018-11, "*Leases (Topic 842) – Targeted Improvements*" also provides lessors with a practical expedient to not separate nonlease components from the associated lease component, similar to the expedient provided for lessees. However, the lessor practical expedient is limited to circumstances in which the nonlease component or components otherwise would be accounted for under the new revenue guidance and both (i) the timing and pattern of transfer are the same for the nonlease component(s) and associated lease component and (ii) the lease component, if accounted for separately, would be classified as an operating lease. We have elected this practical expedient.

Refer to Note 6 – "Leases" for further details on our lease arrangements as a lessee and lessor.

2. Revenue from Contracts with Customers

Disaggregation of Revenue

The following table presents our revenue disaggregated by platform (in thousands):

	Three Months Ended March 31,	
	2019	2018
Online game:		
Mobile	\$ 182,833	\$ 139,830
Other ⁽¹⁾	17,331	21,723
Online game total	\$ 200,164	\$ 161,553
Advertising and other:		
Mobile	\$ 63,260	\$ 42,771
Other ⁽¹⁾	1,979	3,908
Advertising and other total	\$ 65,239	\$ 46,679
Total revenue	\$ 265,403	\$ 208,232

(1) Includes web for Online Game and web advertising revenue and other revenue for Advertising and Other

The following table presents our revenue disaggregated based on the geographic location of our payers (in thousands):

	Three Months Ended March 31,	
	2019	2018
United States	\$ 172,061	\$ 135,996
All other countries ⁽¹⁾	93,342	72,236
Total revenue	\$ 265,403	\$ 208,232

(1) No foreign country exceeded 10% of our total revenue for any periods presented.

Consumable virtual items accounted for 34% of online game revenue in the three months ended March 31, 2019 and 46% of online game revenue in the same period of the prior year. Durable virtual items accounted for 66% of online game revenue in the three months ended March 31, 2019 and 54% of online game revenue in the same period of the prior year. The estimated weighted-average life of durable virtual items was nine months for both the three months ended March 31, 2019 and March 31, 2018.

Contract Balances

We receive payments from our customers based on the payment terms established in our contracts. Payments for online game revenue are required at time of purchase, are non-refundable and relate to non-cancellable contracts that specify our performance obligations. Such payments are initially recorded to deferred revenue and are recognized into revenue as we satisfy our performance obligations. Further, payments made by our players are collected by payment processors and remitted to us generally within 30 days. Our right to the payments collected on our behalf are unconditional and therefore recorded as accounts receivable, net of the associated payment processing fees.

Payments for advertising arrangements are due based on the contractually stated payment terms. For advertising arrangements, the contract terms generally require payment within 30 to 60 days subsequent to the end of the month. Our right to payment from the customer is unconditional and therefore recorded as accounts receivable.

During the three months ended March 31, 2019, we recognized \$109.5 million of revenue that was included in the current deferred revenue balance on December 31, 2018.

The increase in accounts receivable, net during the three months ended March 31, 2019 was primarily driven by a net increase in accounts receivable of \$23.0 million on the acquisition date from our acquisition of Small Giant Games Oy (“Small Giant”) and sales on account during the period exceeding cash collections of current period and previously due amounts. The increase in deferred revenue during the three months ended March 31, 2019 was primarily driven by the sale of virtual items during the period, which includes contribution from Small Giant, exceeding revenue recognized from the satisfaction of our performance obligations.

Unsatisfied Performance Obligations

Substantially all of our unsatisfied performance obligations relate to contracts with an original expected length of one year or less.

3. Marketable Securities

The following tables summarize the amortized cost, gross unrealized gains and losses and fair value of our short-term and long-term investments as of March 31, 2019 and December 31, 2018 (in thousands):

	March 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
Short-term investments:				
Corporate debt securities	\$ 43,681	\$ 17	\$ (5)	\$ 43,693
U.S. government and government agency debt securities	3,001	—	—	3,001
Total	<u>\$ 46,682</u>	<u>\$ 17</u>	<u>\$ (5)</u>	<u>\$ 46,694</u>
Long-term investments:				
Corporate debt securities	\$ 5,968	\$ 4	\$ —	\$ 5,972
Total	<u>\$ 5,968</u>	<u>\$ 4</u>	<u>\$ —</u>	<u>\$ 5,972</u>
	December 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
Short-term investments:				
Corporate debt securities	\$ 36,230	\$ 2	\$ —	\$ 36,232
Total	<u>\$ 36,230</u>	<u>\$ 2</u>	<u>\$ —</u>	<u>\$ 36,232</u>

As of March 31, 2019, all of our short-term investments have contractual maturities of one year or less and all of our long-term investments have contractual maturities between one and two years.

As of March 31, 2019, we did not consider any of our short-term or long-term investments to be other-than-temporarily impaired. We do not intend to sell, nor do we believe it is more likely than not that we will be required to sell, any of the securities in an unrealized loss position. When evaluating our investments for other-than-temporary impairment, we review factors such as the length of time and extent to which fair value has been below its cost basis, the financial condition of the issuer, our ability and intent to hold the security to maturity and whether it is more likely than not that we will be required to sell the investment before recovery of the amortized cost basis.

4. Fair Value Measurements

Our financial assets consist of cash equivalents, short-term and long-term investments, accounts receivable, net, and leasehold receivables. Cash equivalents, short-term investments and long-term investments, which consist of money market funds, corporate debt securities and U.S. government and government agency debt securities, are reported at fair value. Accounts receivable, net and leasehold receivables are stated at the net realizable amount, which approximates fair value.

Our financial liabilities consist of accounts payable and accrued liabilities, which are stated at the invoiced or estimated payout amount, respectively, and approximate fair value, contingent consideration obligations as a result of business acquisitions, which are reported at fair value, lease liabilities, which approximate fair value and loans drawn against our Credit Facility; see Note 10 – “Debt” for further discussion on the loans drawn against our Credit Facility.

As of March 31, 2019, our contingent consideration obligations represent the estimated fair value of the additional consideration payable in connection with our acquisitions of Gram Games in the second quarter of 2018 and Small Giant in the first quarter of 2019.

Under the terms of the Gram Games acquisition, contingent consideration may be payable based on the achievement of certain future profitability performance targets during each annual period following the acquisition date for a total of three years, with no maximum limit as to the contingent consideration achievable. We estimated the acquisition date and subsequent reporting period fair values of the contingent consideration obligation using a Monte Carlo simulation. The significant unobservable inputs used in the fair value measurement of the contingent consideration obligation were Gram Games' projected performance, a risk-adjusted discount rate and performance volatility similar to industry peers. Changes to projected performance of the acquired business could result in a higher or lower contingent consideration obligation in the future. As of December 31, 2018, the estimated fair value of the Gram Games contingent consideration obligation was \$49.0 million and as of March 31, 2019, the estimated fair value of the contingent consideration obligation increased to \$75.5 million, primarily due to stronger than expected performance and the increased probability of achievement. Accordingly, for the three months ended March 31, 2019, we recognized \$26.5 million of related research and development expenses in our consolidated statement of operations.

Under the terms of the Small Giant acquisition, contingent consideration may be payable based on the achievement of certain future profitability performance targets during each annual period following the acquisition date for a total of three years, with no maximum limit as to the contingent consideration achievable. We estimated the acquisition date and subsequent reporting period fair values of the contingent consideration obligation using a Monte Carlo simulation. The significant unobservable inputs used in the fair value measurement of the contingent consideration obligation were Small Giant's projected performance, a risk-adjusted discount rate and performance volatility similar to industry peers. Changes to projected performance of the acquired business could result in a higher or lower contingent consideration obligation in the future. At acquisition, the estimated fair value of the contingent consideration obligation was \$98.0 million. As of March 31, 2019, the estimated fair value of the contingent consideration obligation increased to \$157.0 million, primarily due to stronger than expected performance and the increased probability of achievement. Accordingly, for the three months ended March 31, 2019, we recognized \$59.0 million of related research and development expense in our consolidated statement of operations.

We estimate fair value as the exit price, which represents the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between knowledgeable and willing market participants.

The valuation techniques used to measure the fair value of the Company's financial instruments, all of which have counterparties with high credit ratings, were valued based on quoted market prices or model-driven valuations using significant inputs derived from or corroborated by observable market data. We use a three-tier value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

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

Level 2 — Includes inputs, other than Level 1 inputs, that are directly or indirectly observable in the marketplace.

Level 3 — Unobservable inputs that are supported by little or no market activity.

The composition of our financial assets and liabilities as of March 31, 2019 and December 31, 2018 among the three levels of the fair value hierarchy are as follows (in thousands):

	March 31, 2019			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	\$ 272	\$ —	\$ —	\$ 272
Corporate debt securities	—	3,994	—	3,994
Short-term investments:				
Corporate debt securities	—	43,693	—	43,693
U.S. government and government agency debt securities	—	3,001	—	3,001
Long-term investments:				
Corporate debt securities	—	5,972	—	5,972
Total financial assets	\$ 272	\$ 56,660	\$ —	\$ 56,932
Liabilities:				
Contingent consideration	\$ —	\$ —	\$ 232,500	\$ 232,500

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	\$ 565	\$ —	\$ —	\$ 565
Corporate debt securities	—	4,987	—	4,987
Short-term investments:				
Corporate debt securities	—	36,232	—	36,232
Total financial assets	\$ 565	\$ 41,219	\$ —	\$ 41,784
Liabilities:				
Contingent consideration	\$ —	\$ —	\$ 49,000	\$ 49,000

The following table presents the activity for the three months ended March 31, 2019 related to our Level 3 liabilities (in thousands):

Level 3 Liabilities:	Total
Contingent consideration obligation – December 31, 2018	\$ 49,000
Additions	98,000
Fair value adjustments	85,500
Contingent consideration obligation – March 31, 2019	<u>\$ 232,500</u>

We had no transfers between valuation levels from December 31, 2018 to March 31, 2019.

5. Property and Equipment, Net

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

	March 31, 2019	December 31, 2018
Computer equipment	\$ 21,434	\$ 20,624
Software	35,163	34,937
Land	89,130	89,130
Building and building improvements	203,659	203,873
Furniture and fixtures	10,524	10,321
Leasehold improvements	9,272	6,144
Total property and equipment, gross	\$ 369,182	\$ 365,029
Less: Accumulated depreciation	(101,081)	(98,472)
Total property and equipment, net	\$ 268,101	\$ 266,557

The following represents our property and equipment, net by location (in thousands):

	March 31, 2019	December 31, 2018
United States	\$ 261,170	\$ 262,844
All other countries	6,931	3,713
Total property and equipment, net	\$ 268,101	\$ 266,557

6. Leases

Lessee Arrangements

We determine if an arrangement is a lease at contract inception. If there is an identified asset in the contract (either explicitly or implicitly) and we have control over its use, the contract is (or contains) a lease. In determining if there is an identified asset, we apply judgment in assessing whether the supplier has a substantive substitution right based on the supplier's practical ability to substitute the asset and the economic benefit to do so. If it is determined that a substantive substitution right exists, the contract is not a lease and is not accounted for under ASC Topic 842. With the respect to the servers utilized in certain hosting and data storage arrangements, the Company determined that a substantive substitution right existed given the location of the servers at the supplier's premises, a lack of contractual restrictions preventing the supplier from substituting the servers throughout the period of use and the economic incentive for the supplier to substitute the servers as needed in order to efficiently handle varying levels of demand from its various customers.

Our operating leases are primarily for office facilities. Certain leases include options to extend the lease for a set number of years or early terminate the lease prior to the contractually defined expiration date. We include such extension periods in the lease term when it is reasonably certain that they will be exercised and include such periods beyond the early termination date when it is reasonably certain the early terminations will not be exercised. As of March 31, 2019, the weighted-average remaining lease term for our operating leases was 3.5 years.

We record right-of-use assets, current operating lease liabilities and noncurrent operating lease liabilities in our consolidated balance sheet for operating leases with lease terms greater than 12 months. We have elected not to apply the balance sheet recognition requirements to leases with lease terms of 12 months or less ("short-term leases"). Additionally, we do not separate lease components from non-lease components and therefore allocate the entire consideration to the lease component(s).

Right-of-use assets represent our right to use an underlying asset during the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease. Right-of-use assets and operating lease liabilities are recognized at the lease commencement date based on the present value of the total required fixed payments over the lease term, with the right-of-use assets further adjusted for any payments made prior to lease commencement, lease incentives received and/or initial direct costs incurred. Certain lease arrangements also include variable payments for costs such as common-area maintenance, utilities, taxes or other operating costs, which are based on a percentage of actual expenses incurred or a fluctuating rate which is unknown at the inception of the contract. These variable lease payments are excluded from the measurement of the lease liability.

In determining the present value of lease payments, we discount future lease payments using our incremental borrowing rate since the implicit rate in our various leases is unknown. The incremental borrowing rate is determined at lease commencement for each individual lease and is based on a number of factors, including relevant observable debt transactions, the current economic environment, lease term and currency in which the lease is denominated. As of March 31, 2019, the weighted-average incremental borrowing rate for our operating leases was 5.35%.

We recognize lease expense for operating leases and short-term leases on a straight-line basis over the lease term. Variable lease payments are recognized when the underlying uncertainty is resolved, which is generally when the obligation for those costs are incurred. These expenses are presented as operating expenses in the consolidated statement of operations. For the three months ended March 31, 2019, the components of lease expense were as follows (in thousands):

	Three Months Ended March 31, 2019
Operating lease expense	\$ 1,778
Variable lease expense	523
Total lease expense (1)	<u>\$ 2,301</u>

(1) The expense associated with short-term leases with a lease term of greater than one month were not material for the three months ended March 31, 2019.

For the three months ended March 31, 2019, supplemental cash and noncash information related to operating leases, excluding any transition adjustments, was as follows (in thousands):

	Three Months Ended March 31, 2019
Fixed operating lease payments	\$ 2,273
Right-of-use assets obtained in exchange for operating lease liabilities (noncash)	\$ 11,076

As of March 31, 2019, future lease payments related to our operating leases were as follows (in thousands):

Year ending December 31:	Operating Leases
Remaining 2019	\$ 7,780
2020	9,611
2021	7,860
2022	3,898
2023	2,946
2024	179
Thereafter	—
Total lease payments	32,274
Less: Imputed interest	(3,120)
Total lease liability balance	<u>\$ 29,154</u>

As of March 31, 2019, we do not have any leases that have not yet commenced that create significant rights and obligations.

During the third quarter of 2018, we executed an assignment of our Oxford office lease associated with our fourth quarter 2017 restructuring plan. The original lease term ends in November 2022, with a lessee option to early terminate in November 2019. All terms under the original lease were assigned in full to the assignee, with the assignee becoming primarily liable to make rental payments directly to the landlord. Further, the assignee was required to provide the landlord a security deposit equal to twelve months rent to be used by the landlord in the event of the assignee's non-performance.

In connection with the assignment, the Company became secondarily liable in the event the assignee is unable to perform under the lease. Based on the current rent and related payments, the maximum exposure to the Company is estimated to be \$2.2 million as of March 31, 2019. However, the lease is subject to periodic rate reviews which allow the landlord to make market adjustments to the rent and other related payments and accordingly, the maximum exposure may be greater than this amount. As of March 31, 2019, the fair value of this guarantee is not material.

Lessor Arrangements

We own the building where our San Francisco headquarters is located and have operating lease arrangements with tenants for the remaining available office space. One tenant currently occupies a portion of the building and will eventually occupy approximately 43% of the building, with the lease term concluding in February 2027. The tenant also has two options to extend the lease term for a period of five years each. The original agreement provides for total lease payments of \$167.3 million with escalating lease payments and various lease incentives to be recognized on a straight-line basis over the lease term. In February 2019, the original agreement was amended to provide additional space to the tenant, resulting in an additional \$5.1 million of lease payments to be received over the lease term and an additional \$0.8 million of lease incentives for tenant improvements. As of March 31, 2019, we have a current lease incentive obligation of \$43.8 million related to tenant improvements under this lease.

Further, in October 2018, we entered into a lease agreement to provide approximately 17% of our San Francisco headquarters to another tenant expected to commence in May 2019 with the lease term concluding in September 2031. The tenant has an option to extend the lease term for an additional five years. The agreement provides for total lease payments of \$145.8 million with escalating lease payments and various lease incentives, including a tenant improvement allowances of \$2.4 million.

We have operating lease arrangements with other tenants for our owned corporate headquarters, however, the lease payments are not material to the consolidated financial statements.

We do not separate lease components from non-lease components and therefore allocate the entire consideration in our contracts to the lease components. All of the lease and non-lease components qualify for accounting under ASC Topic 842.

We recognize lease income, net of the lease incentives, within other income (expense), net in the consolidated statement of operations. Variable payments for non-lease components generally include the tenants' share of the building's operating expenses, such as common-area maintenance and utilities, which are based on the tenant's percentage share of total building expenses incurred or a fluctuating rate which is unknown at the inception of the contract. Variable costs are recognized as lease income in the period in which the underlying services are provided. Further, variable payments for the tenant's share of building related taxes, which are based on a percentage of total building square footage occupied, are recognized as lease income in the period in which the taxes are incurred.

For the three months ended March 31, 2019, the components of lease income were as follows (in thousands):

	Three Months Ended March 31, 2019
Operating lease income	\$ 4,621
Variable lease income	498
Total lease income	\$ 5,119

As of March 31, 2019, cash to be received from future operating lease payments were as follows (in thousands):

Year ending December 31:	Operating Leases
Remaining 2019	\$ 13,193
2020	25,927
2021	31,521
2022	32,467
2023	33,441
2024	34,444
Thereafter	136,535
Total lease payments	\$ 307,528

7. Acquisitions

Small Giant Acquisition

On January 2, 2019, we acquired 80% of all issued and outstanding share capital (including all rights to acquire share capital) of Small Giant, a Finnish Company, to expand our live service portfolio and new game pipeline, for total purchase consideration of \$715.5 million. The remaining 20% will be acquired ratably for potential additional cash consideration payable annually based upon the achievement of specified profitability metrics by Small Giant during each of the three years following the closing. The equity rights and privileges of the remaining Small Giant shareholders lack the traditional rights and privileges associated with equity ownership and accordingly, the transaction is accounted for as if the Company acquired 100% of Small Giant on the acquisition date. The future payments associated with Zynga's acquisition of the remaining 20% represent a contingent consideration obligation.

The total purchase consideration included \$333.6 million in cash, \$30.0 million of cash that was deposited into an escrow account for a period of 18 months as security for general representations and warranties, 63,794,746 shares of our Class A common stock valued at \$253.9 million at the acquisition date and contingent consideration of \$98.0 million at the acquisition date. We will record changes in the fair value of the contingent consideration within our consolidated statement of operations in each future reporting period as they occur (see Note 4 – "Fair Value Measurements" for further discussion on this estimate).

Additionally, in connection with the transaction, the Company executed noncompetition agreements with the management of Small Giant for a term of three years following the acquisition date. However, the acquisition date estimated fair value of the noncompetition agreements was not material.

The following table summarizes the acquisition date fair value of the tangible assets, intangible assets, liabilities assumed, contingent consideration payable and related goodwill acquired from Small Giant (in thousands):

	Total
Cash	\$ 34,193
Accounts receivable, net	22,974
Prepaid expenses	2,561
Intangible assets, net:	
Developed technology, useful life of 5 years	155,000
Trade names, useful life of 7 years	32,000
Goodwill	529,290
Property and equipment, net	180
Right-of-use assets	883
Other non-current assets	120
Total assets acquired	<u>777,201</u>
Accounts payable	(1,716)
Income tax payable	(5,623)
Operating lease liabilities	(380)
Other current liabilities	(16,126)
Deferred tax liabilities, net	(37,400)
Non-current operating lease liabilities	(503)
Total liabilities	<u>(61,748)</u>
Total purchase price consideration	<u>\$ 715,453</u>
Fair value of Zynga Stock Consideration issued ⁽¹⁾	(253,903)
Non-current contingent consideration payable	(98,000)
Total cash consideration	<u>\$ 363,550</u>

(1) The fair value of the Zynga Stock Consideration above is estimated based on the total shares issued of 63,794,746 and the closing stock price of Zynga's Common A stock on January 2, 2019 of \$3.98 per share.

The fair value of our intangible assets, net was determined using a risk-adjusted, discounted cash flow model.

Certain amounts noted above are preliminary and subject to change during the respective measurement period (up to one year from the acquisition date) as we obtain additional information for the preliminary fair value estimates of the assets acquired and liabilities assumed. The primary preliminary estimates that are not yet finalized relate to certain tangible assets and liabilities assumed, identifiable intangible assets, income and non-income based taxes and residual goodwill.

Goodwill, which is non-deductible for tax purposes, represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired and is primarily attributable to the assembled workforce of the acquired business and expected synergies at the time of the acquisition. The weighted-average amortization period of the acquired intangible assets was 5.3 years at acquisition.

The results of operations from Small Giant have been included in our consolidated statement of operations since the date of acquisition. During the three months ended March 31, 2019, Small Giant represented \$12.9 million of our total revenue and \$42.9 million of our total net loss. Transaction costs incurred by the Company in connection with the Small Giant acquisition, including transfer taxes and professional fees, were \$7.4 million for the three months ended March 31, 2019 and were recorded within general and administrative expenses in our consolidated statements of operations.

The following table summarizes the pro forma consolidated information of the Company assuming the acquisition of Small Giant had occurred as of January 1, 2018. The unaudited pro forma information for all periods presented includes the business combination accounting effects resulting from the acquisition, including amortization for intangible assets acquired, depreciation expense for tangible assets acquired, and recognition of tax benefits primarily related to the amortization of the intangible asset deferred tax liability. The unaudited pro forma financial information as presented below is for informational purposes only and is not necessarily indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of 2018.

	Three Months Ended March 31,	
	2019	2018
Total revenue	\$ 265,403	\$ 221,248
Net loss	\$ (121,864)	\$ (15,514)
Basic and diluted earnings per share	\$ (0.13)	\$ (0.02)

The significant nonrecurring adjustments reflected in the pro forma consolidated information above include the reclassification of the transactions costs and the related income tax impacts incurred after the acquisition to the earliest period presented. Further, the pro forma consolidated net loss for the three months ended March 31, 2019 includes the \$59.0 million of expense recorded to Zynga's consolidated statement of operations related to the increase in the estimated fair value of the Small Giant contingent consideration payable.

8. Goodwill and Intangible Assets, net

The following table presents the changes to goodwill for the three months ended March 31, 2019 (in thousands):

Goodwill – December 31, 2018 (1)	\$ 934,187
Additions	529,290
Foreign currency translation adjustments (2)	7,888
Goodwill – March 31, 2019 (1)	<u>\$ 1,471,365</u>

(1) There are no accumulated impairment losses at the beginning or end of either period.

(2) The increase is primarily related to translation adjustments on goodwill associated with the acquisitions of NaturalMotion and Small Giant, which have functional currencies denominated in British Pounds and the Euro, respectively.

The details of our acquisition-related intangible assets as of March 31, 2019 and December 31, 2018 are as follows (in thousands):

	March 31, 2019		
	Gross Carrying Value	Accumulated Amortization	Net Book Value
Developed technology	\$ 418,707	\$ (185,129)	\$ 233,578
Trademarks, branding and domain names	64,271	(13,440)	50,831
Noncompetition agreements	8,390	(7,806)	584
Acquired lease intangibles	5,708	(5,555)	153
Total	<u>\$ 497,076</u>	<u>\$ (211,930)</u>	<u>\$ 285,146</u>

	December 31, 2018		
	Gross Carrying Value	Accumulated Amortization	Net Book Value
Developed technology	\$ 263,720	\$ (167,664)	\$ 96,056
Trademarks, branding and domain names	32,772	(11,702)	21,070
Noncompetition agreements	8,390	(7,107)	1,283
Acquired lease intangibles	5,708	(5,517)	191
Total	<u>\$ 310,590</u>	<u>\$ (191,990)</u>	<u>\$ 118,600</u>

Our trademarks, branding and domain names intangible assets include \$6.1 million of indefinite-lived intangible assets as of March 31, 2019 and December 31, 2018. The remaining assets were, and continue to be, amortized on a straight-line basis. Amortization expense related to intangible assets was \$17.6 million for the three months ended March 31, 2019. Comparatively, amortization expense related to intangible assets was \$4.5 million for the three months ended March 31, 2018.

As of March 31, 2019, the weighted-average remaining useful lives of our acquired intangible assets are 4.2 years for developed technology, 6.5 years for trademarks, branding and domain names, 1.8 years for noncompetition agreements, 1.2 years for acquired lease intangibles and 4.6 years in total, for all acquired intangible assets.

As of March 31, 2019, future amortization expense related to our intangible assets is expected to be recognized as shown below (in thousands):

Year ending December 31:	
Remaining 2019	\$ 49,871
2020	66,160
2021	58,610
2022	51,383
2023	40,883
2024	6,786
Thereafter	5,333
Total	\$ 279,026

9. Income Taxes

On a consolidated basis, the benefit from income taxes during the three months ended March 31, 2019 was \$10.3 million and the provision for income taxes during the three months ended March 31, 2018 was \$3.9 million, a change of \$14.1 million. The net change was primarily attributable to a benefit generated from the post-acquisition statutory operating losses from Small Giant and Gram Games.

10. Debt

In December 2018, the Company entered into a credit agreement (the "Credit Agreement") with Bank of America, N.A. that provides for a three-year revolving credit facility (the "Credit Facility") in an aggregate principal amount of up to \$200.0 million and is secured by a blanket lien on the Company's assets, excluding the Company's San Francisco corporate headquarters. The Credit Facility will reduce to \$150.0 million upon the earlier of (i) a sale of the Company's corporate headquarters or (ii) the first anniversary of the closing date, unless, within 90 days after such anniversary, the Company mortgages its corporate headquarters as collateral to secure the Credit Facility. The Company may borrow, repay and re-borrow funds under the Credit Agreement until the third anniversary of the closing date, at which time the Credit Facility will terminate, and all outstanding revolving loans, together with all accrued and unpaid interest, must be repaid. Finally, the Company may use the proceeds of future borrowings under the Credit Facility for general corporate purposes.

At the Company's option, revolving loans accrue interest at a per annum rate based on either (i) the base rate plus a margin ranging from 0.50% to 1.00%, determined based on the Company's consolidated leverage ratio for the four most recent fiscal quarters (the "Consolidated Leverage Ratio") or (ii) the LIBOR rate (for interest periods of one, two, three or six months) plus a margin ranging from 1.50% to 2.00%, determined based on the Company's Consolidated Leverage Ratio ("LIBOR Loan"). The base rate is defined as the highest of (i) the federal funds rate, plus 0.50%, (ii) Bank of America, N.A.'s prime rate and (iii) the LIBOR rate for a one-month interest period plus 1.00%. The Company is also obligated to pay an ongoing commitment fee on undrawn amounts at a rate ranging from 0.25% to 0.35%, determined based on the Company's Consolidated Leverage Ratio.

On December 28, 2018, the Company drew against the Credit Facility for a \$100.0 million LIBOR Loan, with a three-month interest period at an interest rate of 4.31%. On March 28, 2019, the Company continued the \$100.0 million LIBOR loan, for another three-month interest period, at an interest rate of 4.10%. The Company has an additional \$100.0 million of borrowing capacity remaining under the Credit Facility as of March 31, 2019. The estimated fair value of the loan drawn against the Credit Facility, which is based on Level 2 inputs, approximated its carrying value as of March 31, 2019.

Debt issuance costs associated with the Credit Facility were capitalized and will amortize on a straight-line basis over the three-year term of the Credit Agreement, with the expense recorded to other income (expense), net in our consolidated statement of operations.

11. Other Current and Non-Current Liabilities

Other current liabilities consist of the following (in thousands):

	March 31, 2019	December 31, 2018
Accrued accounts payable	\$ 42,703	\$ 22,669
Accrued compensation liability	28,568	41,554
Accrued restructuring liability	—	3,449
Contingent consideration payable	94,900	17,300
Accrued payable from acquisitions	35,000	35,000
Accrued lease incentive obligation	43,787	24,895
Value-added taxes payable	2,186	2,624
Other current liabilities	10,096	9,338
Total other current liabilities	<u>\$ 257,240</u>	<u>\$ 156,829</u>

Accrued compensation liability represents employee bonus and other payroll withholding expenses. Other current liabilities include various expenses that we accrue for transaction taxes, customer deposits and accrued vendor expenses.

Other non-current liabilities consist of the following (in thousands):

	March 31, 2019	December 31, 2018
Contingent consideration obligation	\$ 137,600	\$ 31,700
Accrued payable from acquisitions	30,000	—
Accrued restructuring liability	—	7,613
Uncertain tax positions liability, including interest and penalties	10,848	10,065
Other non-current liabilities	2,919	3,208
Total other non-current liabilities	<u>\$ 181,367</u>	<u>\$ 52,586</u>

12. Stockholders' Equity

We recorded stock-based compensation expense related to grants of employee stock options, restricted stock units ("ZSUs") and performance-based awards in our consolidated statements of operations as follows (in thousands):

	Three Months Ended March 31,	
	2019	2018
Cost of revenue	\$ 284	\$ 431
Research and development	11,715	8,625
Sales and marketing	2,487	1,836
General and administrative	4,287	3,221
Total stock-based compensation expense	<u>\$ 18,773</u>	<u>\$ 14,113</u>

On March 27, 28 and 29, 2019, a director of the Company ratably exercised 3.2 million stock options, of which 2.1 million were unsettled as of March 31, 2019. As a result, the Company recorded a current receivable of \$0.4 million as of March 31, 2019 related to the exercise proceeds to be received. Further, the Company recorded a \$5.4 million current receivable and payable as of March 31, 2019 related to the tax withholding. The total \$5.8 million of cash was subsequently received from the director on April 1 and 2, 2019.

The following table shows stock option activity for the three months ended March 31, 2019 (in thousands, except weighted-average exercise price and weighted-average contractual term):

	Stock Options	Outstanding Options		
		Weighted-Average Exercise Price	Aggregate Intrinsic Value of Stock Options Outstanding	Weighted-Average Contractual Term (in years)
Balance as of December 31, 2018	36,185	\$ 2.35	\$ 57,510	6.23
Granted	4,647	5.37		
Forfeited, expired and cancelled	—	2.80		
Exercised	(3,835)	0.37		
Balance as of March 31, 2019	<u>36,997</u>	\$ 2.93	\$ 88,970	7.06

The following table presents the weighted-average grant date fair value and the related assumptions used to estimate the fair value of our stock options:

	Three Months Ended March 31, 2019
Expected term, in years	6
Risk-free interest rates	2.53%
Expected volatility	43%
Dividend yield	—
Weighted-average estimated fair value of options granted	\$ 2.41

The following table shows a summary of ZSU activity for the three months ended March 31, 2019 (in thousands, except weighted-average grant date fair value):

	Shares	Outstanding ZSUs	
		Weighted-Average Grant Date Fair Value (per share)	Aggregate Intrinsic Value of Unvested ZSUs
Unvested as of December 31, 2018	52,482	\$ 3.49	\$ 206,254
Granted	3,503	5.18	
Vested	(5,717)	3.24	
Forfeited	(1,051)	2.77	
Unvested as of March 31, 2019	<u>49,217</u>	\$ 3.66	\$ 262,332

Stock Repurchases

In April 2018, a share repurchase program was authorized for up to \$200.0 million of our outstanding Class A common stock (the “2018 Share Repurchase Program”). The timing and amount of any stock repurchase will be determined based on market conditions, share price and other factors. The program does not require us to repurchase any specific number of shares of our Class A common stock and may be modified, suspended or terminated at any time without notice. The 2018 Share Repurchase Program will be funded from existing cash on hand or other sources of funding as the Company may determine to be appropriate. Share repurchases under these authorizations may be made through a variety of methods, which may include open market purchases, privately negotiated transactions, block trades, accelerated share repurchase transactions, purchases through 10b5-1 plans or by any combination of such methods. During the three months ended March 31, 2019, no share repurchases were made under the 2018 Share Repurchase Program.

In November 2016, we announced that our Board of Directors authorized a share repurchase program allowing us to repurchase up to \$200.0 million of our outstanding shares of Class A common stock (“2016 Share Repurchase Program”). In 2018, we completed the 2016 Share Repurchase Program by repurchasing 18.2 million shares of our Class A common stock at a weighted-average price of \$3.59 per share for a total of \$65.4 million.

All of our stock repurchases were made through open market purchases under Rule 10b5-1 plans and subsequently retired.

13. Accumulated Other Comprehensive Income (Loss)

The following table shows a summary of changes in accumulated other comprehensive income (loss) by component for the three months ended March 31, 2019 (in thousands):

	Foreign Currency Translation	Unrealized Gains (Losses) on Available-For-Sale Marketable Debt Securities	Total
Balance as of December 31, 2018	\$ (118,441)	\$ 2	\$ (118,439)
Other comprehensive income (loss) before reclassifications	6,963	14	6,977
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	—
Net other comprehensive income (loss)	6,963	14	6,977
Balance as of March 31, 2019	<u>\$ (111,478)</u>	<u>\$ 16</u>	<u>\$ (111,462)</u>

14. Net Income (Loss) Per Share of Common Stock

On May 2, 2018, our founder, Mark Pincus, elected to convert certain outstanding shares of Class B common stock and all outstanding shares of Class C common stock controlled by Mr. Pincus and an affiliated investment entity into an equivalent number of shares of Class A common stock. As a result of Mr. Pincus' conversion, the remaining shares of Class B common stock represented less than 10% of the total voting power of all Zynga stockholders and, accordingly, each remaining outstanding share of Class B common stock automatically converted into one share of Class A common stock. Each Zynga stockholder now has one vote per share on all matters subject to stockholder vote. Following the conversion, no shares of Class B or Class C common stock are outstanding and the total number of authorized shares of capital stock will be reduced to account for the elimination of the Class B and Class C common stock. Accordingly, beginning in the second quarter of 2018, the Company calculated basic and diluted net income (loss) per share under a single-class method.

Prior to the conversion noted above, we computed net income (loss) per share of common stock using the two-class method required for participating securities and multiple classes of common stock. Prior to the date of the initial public offering, we considered all series of our convertible preferred stock to be participating securities due to their non-cumulative dividend rights. Additionally, we considered shares issued upon the early exercise of options subject to repurchase and unvested restricted shares to be participating securities, because the holders of such shares have non-forfeitable dividend rights in the event we declare a dividend for common shares. In accordance with the two-class method, net income allocated to these participating securities, which include participation rights in undistributed net income, is subtracted from net income (loss) to determine total net income (loss) to be allocated to common stockholders.

Basic net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) attributable to common stockholders by the weighted-average number of common shares outstanding, including potential dilutive securities. In computing diluted net income (loss) per share, net income (loss) attributable to common shareholders is re-allocated to reflect the potential impact of dilutive securities, including stock options, unvested ZSUs, unvested performance-based ZSUs and ESPP withholdings. For periods in which we have generated a net loss or there is no income attributable to common stockholders, we do not include dilutive securities in our calculation of diluted net income (loss) per share, as the impact of these awards is anti-dilutive.

The following tables set forth the computation of basic and diluted net income (loss) per share of common stock (in thousands, except per share data):

	Three Months Ended March 31, 2019 Class A
BASIC AND DILUTED:	
Net income (loss) attributable to common stockholders	\$ (128,828)
Weighted-average common shares outstanding	926,230
Net income (loss) per share attributable to common stockholders	<u>\$ (0.14)</u>

	Three Months Ended March 31,		
	2018		
	Class A	Class B	Class C
BASIC:			
Net income (loss) attributable to common stockholders – basic	\$ 5,047	\$ 430	\$ 132
Weighted-average common shares outstanding – basic	782,370	66,740	20,517
Net income (loss) per share attributable to common stockholders – basic	<u>\$ 0.01</u>	<u>\$ 0.01</u>	<u>\$ 0.01</u>
DILUTED:			
Net income (loss) attributable to common stockholders – basic	\$ 5,047	\$ 430	\$ 132
Reallocation of net income (loss) as a result of conversion of Class C shares to Class A shares	132	—	—
Reallocation of net income (loss) as a result of conversion of Class B shares to Class A shares	430	—	—
Reallocation of net income (loss) to Class B and Class C shares	—	41	(3)
Net income (loss) attributable to common stockholders – diluted	<u>\$ 5,609</u>	<u>\$ 471</u>	<u>\$ 129</u>
Weighted-average common shares outstanding – basic	782,370	66,740	20,517
Conversion of Class C to Class A common shares outstanding	20,517	—	—
Conversion of Class B to Class A common shares outstanding	66,740	—	—
Weighted-average effect of dilutive securities:			
Stock options and employee stock purchase plan	10,166	8,296	—
ZSUs	12,605	—	—
Performance-based ZSUs	1,376	—	—
Weighted-average common shares outstanding – diluted	<u>893,774</u>	<u>75,036</u>	<u>20,517</u>
Net income (loss) per share attributable to common stockholders – diluted	<u>\$ 0.01</u>	<u>\$ 0.01</u>	<u>\$ 0.01</u>

The following weighted-average equity awards were excluded from the computation of diluted net income (loss) per share because their effect would have been anti-dilutive for the periods presented (in thousands):

	Three Months Ended March 31,	
	2019	2018
Stock options and employee stock purchase plan	36,713	7,374
ZSUs	50,298	3,042
Total	<u>87,011</u>	<u>10,416</u>

15. Commitments and Contingencies

The amounts represented in the tables below reflect our minimum cash obligations for the respective calendar years based on contractual terms, but not necessarily the periods in which these costs will be expensed in the Company's consolidated statement of operations.

Licensors and Marketing Commitments

We have entered into several contracts with licensors that contain minimum contractual and marketing commitments that may not be dependent on any deliverables. As of March 31, 2019, future minimum contractual royalty payments due to licensors and marketing commitments for the licensed products are as follows (in thousands):

Year ending December 31:	
2019	\$ 11,679
2020	42,328
Thereafter	—
Total	<u>\$ 54,007</u>

Other Purchase Commitments

We have entered into several contracts primarily for hosting of data systems and other services. As of March 31, 2019, future minimum purchase commitments that have initial or remaining non-cancelable terms are as follows (in thousands):

Year ending December 31:	
2019	\$ 20,382
2020	20,165
2021	9,513
Thereafter	—
Total	<u>\$ 50,060</u>

Excluded from tables above is our uncertain income tax position liability of \$10.8 million, which includes interest and penalties, as the Company cannot make a reasonably reliable estimate of the period of cash settlement.

Legal Matters

The Company is involved in legal and regulatory proceedings on an ongoing basis. Some of these proceedings are in early stages and may seek an indeterminate amount of damages. If the Company believes that a loss arising from such matters is probable and can be reasonably estimated, the Company accrues the estimated liability in its financial statements. If only a range of estimated losses can be determined, the Company accrues an amount within the range that, in its judgment, reflects the most likely outcome; if none of the estimates within that range is a better estimate than any other amount, the Company accrues the low end of the range. For proceedings in which an unfavorable outcome is reasonably possible but not probable and an estimate of the loss or range of losses arising from the proceeding can be made, the Company discloses such an estimate, if material. If such a loss or range of losses is not reasonably estimable, the Company discloses that fact. In assessing the materiality of a proceeding, the Company evaluates, among other factors, the amount of monetary damages claimed, as well as the potential impact of non-monetary remedies sought by plaintiffs that may require changes to business practices in a manner that could have a material adverse impact on the Company's business. Legal expenses are recognized as incurred.

Derivative Litigation

Since August 3, 2012, eight stockholder derivative lawsuits have been filed in State or Federal courts in California and Delaware purportedly on behalf of the Company against certain current and former directors and executive officers of the Company. The derivative plaintiffs allege that the defendants breached their fiduciary duties and violated California Corporations Code section 25402 in connection with the Company's initial public offering in December 2011 and the Company's secondary offering in April 2012 by allegedly making false or misleading statements regarding the Company's business and financial projections.

Beginning on August 3, 2012, three of the actions were filed in San Francisco County Superior Court. On October 2, 2012, the court consolidated those three actions as *In re Zynga Shareholder Derivative Litigation*, Lead Case CGC-12-522934. On March 14, 2013, the plaintiffs filed a First Amended Complaint in that consolidated California state action. On March 21, 2013, the court endorsed a stipulation among the parties staying the action pending the ruling on the motion to dismiss in a related federal securities class action. On March 24, 2014, the court endorsed a stipulation among the parties staying the action pending a ruling on a motion to dismiss the First Amended Complaint in the federal securities class action.

On April 24, 2015, the court endorsed a stipulation among the parties staying the action until the Delaware Chancery Court ruled on the defendants' motion to stay or dismiss in the action described below. On May 2, 2016, the court endorsed a stipulation among the parties staying the action until final resolution of plaintiff's appeal in the Delaware derivative action that is discussed in further detail below. At a status conference on March 8, 2017, the court stayed the action, in light of the Company's formation of a special litigation committee discussed below. At a status conference on September 29, 2017, the court extended the stay in the action until April 9, 2018. On April 20, 2018, the Special Litigation Committee (discussed below), acting on the Company's behalf, filed a motion to dismiss the action on grounds that the appropriate forum for resolution of the action is the Delaware Court of Chancery. On May 25, 2018, plaintiffs' counsel requested, and the court granted, a voluntary dismissal of the action in its entirety. This action has now been dismissed.

Beginning on August 16, 2012, four stockholder derivative actions were filed in the U.S. District Court for the Northern District of California. On December 3, 2012, the court consolidated these four actions as *In re Zynga Inc. Derivative Litigation*, Lead Case No. 12-CV-4327-JSW. On March 11, 2013, the court endorsed a stipulation among the parties staying the action pending the ruling on the motion to dismiss in a related federal securities class action. On March 21, 2014, the court issued an order continuing the stay pending a ruling on a motion to dismiss the First Amended Complaint in the federal securities class action. On April 27, 2015, the court endorsed a stipulation among the parties staying the action until the Delaware Chancery Court ruled on the defendants' motion to stay or dismiss in the action described below. On April 27, 2016, the court endorsed a stipulation among the parties staying the action until final resolution of plaintiff's appeal in the Delaware derivative action discussed below. On January 26, 2017, the court endorsed a stipulation among the parties providing for a further stay of this action until July 14, 2017. On August 17, 2017, the court endorsed a stipulation among the parties providing for a further stay of this action until September 29, 2017. On October 27, 2017, the court endorsed a stipulation among the parties provided for further stay of this action until April 9, 2018. On March 29, 2018, the plaintiffs filed a motion to lift the stay in the action, and on April 17, 2018, the Special Litigation Committee, acting on behalf of the Company, filed a cross-motion to dismiss the action on grounds that the appropriate forum for resolution of the action is the Delaware Court of Chancery. On May 17, 2018, the court granted plaintiffs' motion to lift the stay, and simultaneously granted defendants' motion to dismiss the action. This consolidated action has now been dismissed.

On April 4, 2014, a derivative action was filed in the Court of Chancery of the State of Delaware captioned *Sandys v. Pincus, et al.* Case No. 9512-CB. The derivative actions include claims for, among other things, unspecified damages in favor of the Company, certain corporate actions to purportedly improve the Company's corporate governance, and an award of costs and expenses to the derivative plaintiffs, including attorneys' fees.

On December 9, 2014, the defendants filed a motion to stay or dismiss the action. The court held a hearing on defendants' motion on November 17, 2015, and on February 29, 2016, the court granted the Company's motion to dismiss. On March 29, 2016, plaintiff filed a notice of appeal of the court's order dismissing the action. On December 5, 2016, the Delaware Supreme Court reversed the Court of Chancery's dismissal and remanded the case for further proceedings. On June 7, 2017, the court endorsed a stipulation among the parties staying the action through July 31, 2017, in light of the Company's formation of a Special Litigation Committee, as noted below. On July 18, 2017, the court endorsed a stipulation among the parties continuing the stay in the action through September 7, 2017. On September 11, 2017, the court endorsed a stipulation among the parties continuing the stay in the action through October 31, 2017. Subsequently, on January 5, 2018, the Special Litigation Committee, acting on behalf of the Company, filed a supplemental motion to stay the action until February 20, 2018, to allow the parties to engage in settlement negotiation.

On February 3, 2017, the Company's Board of Directors established a special litigation committee (the "Special Litigation Committee") consisting of Janice Roberts and Carol Mills, to investigate the claims asserted against certain former and current officers and directors of the Company in the shareholder derivative suits described above (collectively, the "Derivative Litigation"). The Company's Board of Directors determined that each member of the Special Litigation Committee is disinterested and independent with respect to the Derivative Litigation. The Special Litigation Committee was created to determine what actions are appropriate and in the best interests of the Company, and decide whether it is in the best interests of the Company to pursue, dismiss or consensually resolve the claims asserted in the Derivative Litigation. The Special Litigation Committee's findings and determinations shall be final and not subject to review by the Company's Board of Directors and in all respects shall be binding upon the Company.

On March 1, 2018, the Special Litigation Committee (on behalf of the Company) and the *Sandys* defendants filed a stipulation of settlement notifying the court that these parties had reached an agreement to settle the action, releasing all claims against the defendants in consideration of an insurer-funded settlement payment that will be made to the Company. In connection with filing of the stipulation of settlement, the Special Litigation Committee also filed a report related to its investigation of the matters alleged in the action, and its conclusions with respect thereto and with respect to the proposed settlement.

In response to the filing of the stipulation of settlement, the plaintiff requested discovery relating to the settlement, and following negotiations over scope of the discovery, the Special Litigation Committee responded with written and oral discovery. Following the close of settlement-related discovery in late October 2018, plaintiff informed the parties that he will endorse the stipulated and proposed settlement as a reasonable exercise of the Special Litigation Committee's business judgment. Accordingly, the settling parties filed a revised stipulated proposed scheduling order that the court signed and entered on October 30, 2018.

The terms of that scheduling order require Zynga to provide shareholder notice of the settlement within 10 business days of the scheduling order's entry and establish a briefing schedule and a date of January 17, 2019 for a hearing regarding final court approval of the settlement and plaintiff's application for a related fee and expense award.

Following satisfaction of all aspects of the scheduling order, and the lack of any objection by any shareholder, the court held the final approval hearing on January 18, 2019. At the hearing, the court determined the proposed settlement to be fair, adequate, and reasonable, and entered an order approving the \$12.0 million settlement and dismissing the underlying action with prejudice. The court also approved a fee award to plaintiff's counsel in the amount of \$2.3 million. The Company has received the \$12.0 million settlement proceeds, and has distributed the fee award to plaintiff's counsel from those proceeds, resulting in a net settlement amount of \$9.7 million retained by the Company. The benefit from the net settlement was included in general and administrative expenses in our consolidated statement of operations for the three months ended March 31, 2019.

The court's judgment terminating the action is now final, and the Company considers this matter fully resolved.

Other

The Company is, at various times, also party to various other legal proceedings and claims not previously discussed which arise in the ordinary course of business. In addition, the Company may receive notifications alleging infringement of patent or other intellectual property rights. Adverse results in any such litigation, legal proceedings or claims may include awards of substantial monetary damages, expensive legal fees, costly royalty or licensing agreements, or orders preventing us from offering certain games, features, or services, and may also result in changes in the Company's business practices, which could result in additional costs or a loss of revenue and could otherwise harm the Company's business. Although the results of such litigation cannot be predicted with certainty, the Company believes that the amount or range of reasonably possible losses related to such pending or threatened litigation will not have a material adverse effect on its business, operating results, cash flows, or financial condition should such litigation be resolved unfavorably.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion of our financial condition and results of operations in conjunction with the consolidated financial statements and the related notes included elsewhere in this Quarterly Report on Form 10-Q. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this Quarterly Report on Form 10-Q, particularly in "Special Note Regarding Forward-Looking Statements" and "Risk Factors." The forward-looking statements included in this Quarterly Report on Form 10-Q are made only as of the date hereof.

Overview

We are a leading provider of social game services with approximately 72 million average mobile monthly active users ("MAUs") in the first quarter of 2019. We develop, market and operate social games as live services played on mobile platforms, such as iOS and Android, and social networking sites such as Facebook. Generally, all of our games are free to play, and we generate substantially all of our revenue through the sale of in-game virtual items ("online game revenue") and advertising services ("advertising revenue").

We are a pioneer and innovator of social games and a leader in making "play" a core activity primarily on mobile devices and social networking sites. Our objective is to become the worldwide leader in play by connecting the world through games.

Consistent with our free-to-play business model, a small portion of our players have historically been payers. For example, in the first quarter of 2019, we had approximately 1.4 million average mobile monthly unique payers ("MUPs"), who represented approximately 3.3% of our average mobile monthly unique users ("MUUs") – for more information about the uses, estimates and limitations of these and other operating metrics, please see "Key Operating Metrics" below. Because the opportunity for social interactions increases as the number of players increases, we believe that maintaining and growing our overall number of players, including the number of players who may not purchase virtual items, is important to the success of our business. As a result, we believe that the number of players who choose to purchase virtual items will continue to constitute a small portion of our overall players.

Our top three online game revenue-generating games historically have contributed to a significant portion of our revenue, though the games that represent our top three online game revenue-generating games vary over time. Our top three online game revenue-generating games accounted for 45%, 45% and 44% of our online game revenue in 2018, 2017 and 2016, respectively. With respect to advertising and other revenue, our *Words with Friends* games generated a substantial portion of our advertising and other revenue in 2018, 2017 and 2016.

Small Giant Acquisition

On January 2, 2019, we acquired 80% of all issued and outstanding share capital (including all rights to acquire share capital) of Small Giant to expand our live service portfolio and new game pipeline, for total purchase consideration of \$715.5 million. The remaining 20% will be acquired ratably for potential additional cash consideration payable annually based upon the achievement of specified profitability metrics by Small Giant during each of the three years following the closing. The equity rights and privileges of the remaining Small Giant shareholders lack the traditional rights and privileges associated with equity ownership and accordingly, the transaction is accounted for as if the Company acquired 100% of Small Giant on the acquisition date. The future payments associated with Zynga's acquisition of the remaining 20% represent a contingent consideration obligation.

The total purchase consideration included \$333.6 million in cash, \$30.0 million of cash that was deposited into an escrow account for a period of 18 months as security for general representations and warranties, 63,794,746 shares of our Class A common stock valued at \$253.9 million at the acquisition date, and contingent consideration of \$98.0 million at the acquisition date.

As discussed below under "Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting Our Performance", mobile online game revenue is recognized ratably over the estimated average playing period of payers while platform fees are expensed as incurred. Accordingly, bookings from Small Giant's *Empires & Puzzles* will initially be deferred and recognized into revenue ratably over the estimated average playing period of payers – which we expect will continue to result in a significant increase in deferred revenue in 2019.

How We Generate Revenue

We operate our social games as live services that allow players to play for free. We generate revenue primarily from the sale of in-game virtual items and advertising services. Revenue growth will continue to depend largely on our ability to attract and retain players and more effectively monetize our player base through the sale of in-game virtual items and advertising. We intend to do this through the launch of new games, enhancements to current games and expansion into new markets and distribution platforms.

Online game. We provide our players with the opportunity to purchase virtual items that enhance their game-playing experience. We believe players choose to pay for virtual items for the same reasons they are willing to pay for other forms of entertainment – they enjoy the additional playing time or added convenience, the ability to personalize their own game boards, the satisfaction of leveling up and the opportunity for sharing creative expressions. We believe players are more likely to purchase virtual items when they are connected to and playing with their friends, whether those friends play for free or also purchase virtual items. Players may also elect to pay a one-time download fee to obtain certain mobile games free of third-party advertisements.

In 2019, our business continued generating a higher percentage of revenue and bookings through mobile platforms than through the Facebook platform. In the three months ended March 31, 2019, we estimate that 51%, 40% and 7% of our revenue and 49%, 45% and 5% of our bookings were generated on Apple, Google and Facebook platforms, respectively, while in the same period of the prior year, we estimate that 50%, 36% and 10% of our revenue and 50%, 37% and 10% of our bookings were generated on Apple, Google and Facebook platforms, respectively. This information is estimated because certain payment methods we accept and certain advertising networks do not allow us to determine the platform used.

On platforms other than Facebook, players purchase our virtual items through various widely accepted payment methods offered in the games, including Apple iTunes accounts, Google Play accounts, PayPal and credit cards. For all payment transactions in our games under Facebook's local currency-based payments program, Facebook remits to us an amount equal to 70% of the price we requested to be charged to our player.

In addition, we also incur licensing fees related to the use of intellectual property within our games and our operating margins can be affected by the mix of player purchases from games in which we own the intellectual property as compared to games in which we license certain intellectual properties. For example, we use licensed intellectual property as creative assets in games such as *Hit It Rich! Slots*, *Wizard of Oz Slots* and *Wonka's World of Candy*, and we are developing new games using licensed intellectual property for Harry Potter™, Star Wars™ and Game of Thrones™. While overall bookings within these games will benefit our revenue, a shift in the mix of our revenue towards such games using licensed intellectual property could decrease our operating margins.

Advertising and other. Advertising revenue primarily includes display ads, engagement ads and offers and branded virtual items and sponsorships. Other revenue primarily consists of royalties received from the licensing of our brands.

Key Metrics

We regularly review a number of metrics, including the following key financial and operating metrics, to evaluate our business, measure our performance, identify trends in our business, prepare financial projections and make strategic decisions.

Key Financial Metrics

Revenue and Bookings. Bookings is a non-GAAP financial measure that is equal to revenue recognized plus or minus the change in deferred revenue during the period. We record the sale of virtual items as deferred revenue and then recognize that revenue over the estimated average playing period of payers or as the virtual items are consumed. Advertising sales consisting of certain branded virtual items and sponsorships are also initially recorded to deferred revenue and then recognized ratably over the estimated life of the branded virtual item, similar to online game revenue, or over the term of the advertising arrangement, depending on the nature of the agreement. Bookings is a fundamental top-line metric we use to manage our business, as we believe it is a useful indicator of the sales activity in a given period. Over the long-term, the factors impacting our revenue and bookings are the same. However, in the short term, there are factors that may cause revenue to exceed or be less than bookings in any period.

We use revenue and bookings to evaluate the results of our operations, generate future operating plans and assess the performance of our company. While we believe that bookings are useful in evaluating our business, this information should be considered as supplemental in nature and is not intended to be considered in isolation of, as a substitute for, or as superior to, revenue recognized in accordance with U.S. GAAP. In addition, other companies, including companies in our industry, may calculate bookings differently or not at all, which reduces its usefulness as a comparative measure.

The following table presents a reconciliation of total revenue to total bookings for each of the periods presented (in thousands):

	Three Months Ended March 31,	
	2019	2018
Reconciliation of Revenue to Bookings:		
Revenue	\$ 265,403	\$ 208,232
Change in deferred revenue	94,082	11,240
Bookings	<u>\$ 359,485</u>	<u>\$ 219,472</u>

The following table presents a reconciliation of mobile revenue to mobile bookings for each of the periods presented (in thousands):

	Three Months Ended March 31,	
	2019	2018
Reconciliation of Mobile Revenue to Mobile Bookings:		
Mobile revenue	\$ 246,093	\$ 182,601
Change in mobile deferred revenue	95,305	10,822
Mobile bookings	<u>\$ 341,398</u>	<u>\$ 193,423</u>

Limitations of Bookings

Key limitations of bookings are:

- bookings do not reflect that we defer and recognize online game revenue and revenue from certain advertising transactions over the estimated average playing period of payers, the average life of branded virtual items, the term of the advertising arrangement or as virtual items are consumed; and
- other companies, including companies in our industry, may calculate bookings differently or not at all, which reduces their usefulness as a comparative measure.

Because of these limitations, you should consider bookings along with other financial performance measures, including revenue, net income (loss) and our other financial results presented in accordance with U.S. GAAP.

Key Operating Metrics

We manage our business by tracking several operating metrics: “Mobile DAUs,” which measure daily active users of our mobile games, “Mobile MAUs,” which measure monthly active users of our mobile games, “Mobile MUUs,” which measure monthly unique users of our mobile games, “Mobile MUPs,” which measure monthly unique payers in our mobile games, and “Mobile ABPU,” which measures our average daily mobile bookings per average Mobile DAUs, each of which is recorded and estimated by our internal analytics systems. We determine these operating metrics by using internal company data based on tracking of user account activity. We also use information provided by third parties, including third party network logins provided by platform providers, to help us track whether a player logged in under two or more different user accounts is the same individual. We believe that the amounts are reasonable estimates of our user base for the applicable period of measurement and that the methodologies we employ and update from time-to-time are reasonably based on our efforts to identify trends in player behavior; however, factors relating to user activity and systems and our ability to identify and detect attempts to replicate legitimate player activity may impact these numbers.

Mobile DAUs. We define Mobile DAUs as the number of individuals who played one of our mobile games during a particular day. Under this metric, an individual who plays two different mobile games on the same day is counted as two Mobile DAUs. We use information provided by third parties to help us identify individuals who play the same mobile game to reduce this duplication. However, because we do not always have the third party network login data to link an individual who has played under multiple user accounts, a player may be counted as multiple Mobile DAUs. Average Mobile DAUs for a particular period is the average of the Mobile DAUs for each day during that period. We use Mobile DAUs as a measure of mobile audience engagement.

Mobile MAUs. We define Mobile MAUs as the number of individuals who played one of our mobile games in the 30-day period ending with the measurement date. Under this metric, an individual who plays two different mobile games in the same 30-day period is counted as two Mobile MAUs. We use information provided by third parties to help us identify individuals who play the same mobile game to reduce this duplication. However, because we do not always have the third party network login data to link an individual who has played under multiple user accounts, a player may be counted as multiple Mobile MAUs. Average Mobile MAUs for a particular period is the average of the Mobile MAUs at each month-end during that period. We use Mobile MAUs as a measure of total mobile game audience size.

Mobile MUUs. We define Mobile MUUs as the number of individuals who played one or more of our mobile games, which we were able to verify were played by the same individual in the 30-day period ending with the measurement date. An individual who plays more than one of our mobile games in a given 30-day period would be counted as a single Mobile MUU to the extent we can verify that the mobile games were played by the same individual. However, because we do not always have the third party network login data necessary to link an individual who has played under multiple user accounts in a given 30-day period, an individual may be counted as multiple Mobile MUUs. Because many of our players play more than one mobile game in a given 30-day period, Mobile MUUs are always equal to or lower than Mobile MAUs in any given time period. Average Mobile MUUs for a particular period is the average of the Mobile MUUs at each month end during that period. We use Mobile MUUs as a measure of total audience reach across our network of mobile games.

Mobile MUPs. We define Mobile MUPs as the number of individuals who made a payment in a mobile game at least once during the applicable 30-day period through a payment method for which we can quantify the number of individuals. Mobile MUPs do not include individuals who use certain payment methods for which we cannot quantify the number of unique payers. However, because we do not always have the third party network login data necessary to link an individual who has paid under multiple user accounts in a 30-day period, a player who has paid using multiple user accounts may be counted as multiple Mobile MUPs. Mobile MUPs are presented as an average of the three months in the applicable quarter. We use Mobile MUPs as a measure of the number of individuals who made payments across our network of mobile games during a 30-day period.

Mobile ABPU. We define Mobile ABPU as our total mobile bookings in a given period, divided by the number of days in that period, divided by, the average Mobile DAUs during the period. We believe that Mobile ABPU provides useful information to investors and others in understanding and evaluating our results in the same manner as management. We use Mobile ABPU as a measure of overall monetization across all of our mobile players through the sale of virtual items and advertising.

Our business model for our social games is designed so that, as there are more players that play our games, social interactions increase and the more valuable our games and our business become. All engaged players of our games help drive our bookings and, consequently, both online game revenue and advertising revenue. Virtual items are purchased by players who are socializing with, competing against or collaborating with other players, most of whom do not buy virtual items. Accordingly, we primarily focus on the aforementioned key operating metrics, which together we believe best reflect key audience metrics.

Consistent with our focus on mobile gaming platforms, beginning with the first quarter of 2019, we now report these audience-related metrics based only on mobile platforms. We have ceased including our web-based games in these audience metrics as a result of their decreasing significance as part of our overall financial and operating results and the technical challenges resulting from increased volumes of apparent player activity that we are unable to reliably validate and de-duplicate, as these web-based games are generally more susceptible than mobile platforms in attempts to replicate legitimate player activity.

In order to provide our best estimates of actual player metrics, we continually evaluate our methodologies including estimating audience metrics by applying data science techniques to identify suspicious player behavior. While we devote significant time and effort to developing player metrics, our estimates may not accurately reflect the actual amount of players in a reported period and our methodologies do not consistently identify all invalid traffic in prior reporting periods.

Specifically, for the three months ending March 31, 2019, we updated our methodologies and approaches for identifying automated attempts to replicate legitimate player activity. Our estimation of such invalid traffic can vary from period to period, and we have identified periodic spikes in such activity (for example, in December 2018 when we previously included web-based games in our audience metrics, an invalid spike in web-based *Zynga Poker* player activity resulted in our exclusion of the game's web-based audience data from that month).

The table below shows estimated average Mobile DAUs, Mobile MAUs, Mobile MUUs, Mobile MUPs and Mobile ABPU for the three months ended March 31, 2019 and 2018:

	Three Months Ended March 31,	
	2019	2018
	(users and payers in millions)	
Average Mobile DAUs(1) (3)	22	23
Average Mobile MAUs(1) (3)	72	82
Average Mobile MUUs(2) (3)	43	46
Average Mobile MUPs(2) (3)	1.4	1.0
Mobile ABPU	\$ 0.170	\$ 0.095

- (1) We do not have the third party network login data to link an individual who has played under multiple user accounts and accordingly, actual Mobile DAU and Mobile MAU may be lower than reported due to the potential duplication of these individuals. Specifically, for the three months ended March 31, 2019, Mobile DAUs and Mobile MAUs incrementally include *Solitaire*, our Facebook Instant Games, games acquired from Gram Games in May 2018 and games acquired from Small Giant in January 2019; and for the three months ended March 31, 2018, Mobile DAUs and Mobile MAUs incrementally include *Daily Celebrity Crossword*, *Solitaire*, our Facebook Instant Games and the casual card games acquired in December 2017.
- (2) Games referenced in footnote (1) are excluded from Mobile MUUs and Mobile MUPs to avoid potential double counting as our systems are unable to distinguish whether a player of these games is also a player of the Company's other games during the applicable time periods.
- (3) Amounts reported for the three months ended March 31, 2018 have not been adjusted to reflect any subsequent updates to the reporting and estimation methodologies used to identify attempts to replicate legitimate player activity due to the potential variability in player behavior and other factors that can influence the various data sets. Assuming consistency in the player data profiles across periods, we estimate that the impact of new methodologies on the amounts previously reported during 2018 may reduce our average Mobile DAUs and average Mobile MAUs by approximately 5-10%. As a result, these audience metrics may not be comparable to prior periods.

Average Mobile DAUs and Mobile MAUs decreased in the three months ended March 31, 2019 compared to the same period of the prior year primarily due to declines in mobile audience for *Zynga Poker*, *Words With Friends*, *Solitaire* and older mobile games, with the decrease in average Mobile MAUs further driven by declines in mobile audience for games on mobile messenger platforms (i.e., Facebook Instant Games). The overall decline in Mobile DAUs and Mobile MAUs was partially offset by the contribution from Gram Games and Small Giant, as these games were acquired in May 2018 and January 2019, respectively.

Average Mobile MUUs decreased in the three months ended March 31, 2019 compared to the same period of the prior year primarily due to a decline in Mobile MAUs from *Zynga Poker* and older mobile games, partially offset by an increase from mobile unique users from our casual card games, which were tracked in the Company's internal analytics systems for the first time beginning in the first quarter of 2019. Average Mobile MUPs increased primarily from mobile unique payers from our casual card games. Mobile ABPU increased in the three months ended March 31, 2019 compared to the same period of the prior year due to an increase in mobile bookings and decrease in Mobile DAUs.

Other Metrics

Although our management primarily focuses on the operating metrics above, we also monitor periodic trends in our paying players of our games. The table below shows average monthly unique mobile payer bookings, average Mobile MUPs and monthly unique mobile payer bookings per Mobile MUP:

	Three Months Ended March 31,	
	2019	2018
Average monthly unique mobile payer bookings (in millions) ⁽¹⁾	\$ 48	\$ 45
Average Mobile MUPs (in millions) ⁽²⁾	1.4	1.0
Monthly unique mobile payer bookings per Mobile MUP ⁽³⁾	\$ 34	\$ 43

- (1) Average monthly unique mobile payer bookings represent the monthly average amount of mobile bookings for the applicable quarter that we received through payment methods for which we can quantify the number of unique payers and excludes mobile bookings from certain payment methods for which we cannot quantify the number of unique payers and bookings from advertising. For the three months ended March 31, 2019, mobile bookings from *Solitaire*, our Facebook Instant Games, games acquired from Gram Games in May 2018 and games acquired from Small Giant in January 2019 are excluded. For the three months ended March 31, 2018, mobile bookings from *Daily Celebrity Crossword*, *Solitaire*, our Facebook Instant Games and the casual card games acquired in December 2017 are excluded.
- (2) For the three months ended March 31, 2019, Mobile MUPs from *Solitaire*, our Facebook Instant Games, games acquired from Gram Games in May 2018 and games acquired from Small Giant in January 2019 are excluded. For the three months ended March 31, 2018, Mobile MUPs from *Daily Celebrity Crossword*, *Solitaire*, our Facebook Instant Games and the casual card games acquired in December 2017 are excluded.
- (3) Monthly unique mobile payer bookings per Mobile MUP is calculated by dividing average monthly unique mobile payer bookings by average Mobile MUPs.

When comparing the three months ended March 31, 2019 to the same period of the prior year, average monthly unique mobile payer bookings increased primarily due to the contribution from the casual card games acquired in December 2017, which were tracked in the Company's internal analytics systems for the first time beginning during the first quarter of 2019, while average monthly unique mobile payer bookings per Mobile MUP decreased due to a larger increase in Mobile MUP relative to the increase in average monthly unique mobile payer bookings.

Although we monitor our unique mobile payer metrics, we focus on monetization, including in-game advertising, of all of our players and not just those who are payers. Accordingly, we strive to enhance content and our players' game experience to increase our bookings and ABPU, which is a measure of overall monetization across all of our players through the sale of virtual items and advertising. Future growth in audience and engagement will depend on our ability to retain current players, attract new players, launch new games and expand into new markets and distribution platforms, and the success of our network. Our operating metrics may not correlate directly to quarterly revenue or bookings trends.

Q1 2019 Highlights

- **Mobile Growth.** We delivered our best mobile revenue and bookings performance in Zynga history, with mobile revenue of \$246.1 million and mobile bookings of \$341.4 million.
- **Small Giant Acquisition.** On January 2, 2019, the Company acquired 80% of Small Giant, the creators of *Empire & Puzzles* – an approachable match-3 mobile game with deeper gameplay elements including hero collection, base building and social alliances, for total purchase price consideration of \$715.5 million, which includes a mix of both cash and Zynga common stock. We will acquire the remaining 20% of Small Giant's shares ratably for potential additional cash consideration during each of the three years following the closing.
- **Adoption of ASC Topic 842.** We adopted ASC Topic 842 *Leases* on January 1, 2019. Under a cumulative-effect transition method, we recognized right-of-use assets of \$9.1 million, which includes the elimination of our remaining prepaid rent and deferred rent balances, current operating lease liabilities of \$7.6 million and non-current operating lease liabilities of \$12.4 million.
- **Derivative Litigation Settlement.** Final court approval was granted with respect to a certain stockholder derivative litigation, resulting in a net settlement amount of \$9.7 million retained by the Company. The benefit from the net settlement was included in general and administrative expenses in our consolidated statement of operations for the three months ended March 31, 2019.

Factors Affecting Our Performance

Platform agreements. Our games are primarily distributed, marketed and promoted through third parties, primarily Apple's App Store, the Google Play Store and Facebook. Virtual items for our games are purchased through the payment processing systems of these platform providers. We generate a significant portion of our revenue, bookings and players through the Apple, Google and Facebook platforms and expect to continue to do so for the foreseeable future as we launch more games for mobile devices. Apple, Google and Facebook generally have the discretion to set the amounts of their platform fees and change their platforms' terms of service and other policies with respect to us or other developers in their sole discretion, and those changes may be unfavorable to us. These platform fees are recorded as costs of revenue as incurred, while we recognize mobile online game revenue over the average playing period of payers, which generally results in costs of revenue exceeding revenue early in the life of a new or acquired game.

Launch of new games and release of enhancements. Our revenue and bookings results have been driven by the launch of new games and the release of fresh content and new features in existing games. Our future success depends on our ability to innovate and provide fresh content to keep our existing players engaged, while also engaging new and lapsed players, and launch and monetize new titles on various platforms. Although the amount of revenue and bookings we generate from an enhancement to an existing game or launch of a new game or can vary significantly, we expect our revenue and bookings to be correlated to our success in releasing engaging content and features for our existing games and the success and timely launch of our new games. Further, revenue and bookings from many of our games may decline over time after reaching a peak of popularity and player usage. We often refer to the speed of this decline as the decay rate of a game. As a result of this decline in the revenue and bookings of our games, our business depends on our ability to consistently release fresh content for our existing games and launch new games that achieve significant popularity and have the potential to become franchise games.

Game monetization. We generate most of our bookings and revenue from the sale of virtual items in our games. The degree to which our players choose to pay for virtual items in our games is driven by our ability to create content and virtual items that enhance the game-play experience. Our revenue, bookings and overall financial performance are affected by the number of players and the effectiveness of our monetization of players through the sale of virtual items and advertising. In addition, mobile players have historically monetized at a lower level than web. The percentage of paying players may increase or decrease based on a number of factors, including growth in mobile games as a percentage of total game audience, localization of content in international markets and the availability of payment options.

Investment in game development. In order to develop new games and enhance the content and features in our existing games, we must continue to invest in a significant amount of engineering and creative resources. These expenditures generally occur in advance of the launch of a new game or the release of new content, and the resulting revenue may not equal or exceed our development costs, or the game or feature may be abandoned in its entirety. In addition, as discussed below, we recognize online game revenue over the average playing period of payers, which generally results in expenses exceeding revenue early in the life of a new or acquired game.

Player acquisition costs. We utilize advertising and other forms of player acquisition and retention to grow and retain our player audience. These expenditures generally relate to the promotion of new game launches and ongoing performance-based programs to drive new player acquisition and lapsed player reactivation. Over time, these acquisition and retention-related programs may become either less effective or costlier, negatively impacting our operating results. Additionally, as our player base becomes more heavily concentrated on mobile platforms, our ability to drive traffic to our games through unpaid channels may become diminished, and the overall cost of marketing our games may increase.

New market development. We are investing in new distribution channels, mobile platforms and international markets to expand our reach and grow our business. For example, we have continued to hire additional employees and acquire companies with experience developing mobile applications. Our ability to be successful will depend on our ability to develop a successful mobile network, obtain new players and retain existing players on new and existing social networks and attract advertisers.

As we expand into new markets and distribution channels, we expect to incur headcount, marketing and other operating costs in advance of the associated revenue and bookings. Our financial performance will be impacted by our investment in these initiatives and their success.

Hiring and retaining key personnel. Our ability to compete depends in large part on our ability to hire and retain key talent and match that key talent to our current business needs. We are continually reviewing our hiring and retention programs against best practices and for optimal efficiencies. In addition to employee attrition, we have also implemented, and continue to implement, certain cost reduction initiatives to better align our operating expenses with our revenue, including reducing or redeploying our headcount, hiring in lower cost geographies, and consolidating certain facilities.

Results of Operations

Revenue

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Online game:			
Mobile	\$ 182,833	\$ 139,830	31%
Other ⁽¹⁾	17,331	21,723	(20)%
Online game total	\$ 200,164	\$ 161,553	24%
Advertising and other:			
Mobile	\$ 63,260	\$ 42,771	48%
Other ⁽¹⁾	1,979	3,908	(49)%
Advertising and other total	\$ 65,239	\$ 46,679	40%
Total revenue	\$ 265,403	\$ 208,232	27%

(1) Includes web for Online Game and web advertising revenue and other revenue for Advertising and Other.

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Total revenue increased \$57.2 million in the three months ended March 31, 2019 compared to the same period of the prior year, while bookings increased \$140.0 million in the three months ended March 31, 2019 compared to the same period of the prior year.

Mobile online game revenue increased \$43.0 million in the three months ended March 31, 2019 compared to the same period of the prior year, while other online game revenue decreased \$4.4 million over the same period, resulting in a net online game revenue increase of \$38.6 million.

The increase in mobile online game revenue of \$43.0 million was primarily attributable to increases in revenue from *Merge Dragons!* of \$27.7 million and *Empires & Puzzles* of \$10.6 million, as these games were acquired in May 2018 and January 2019, respectively. The increase was further supplemented by an increase in revenue from our casual card games in the amount of \$9.8 million as a result of higher amortization of prior period deferred revenue and *Words with Friends* in the amount of \$6.0 million due to the overall increase in bookings and higher amortization of prior period deferred revenue. These increases were offset by a decrease in revenue from *Zynga Poker* and *Dawn of Titans* in the amounts of \$6.2 million and \$5.0 million, respectively, due to the overall decline in bookings and audience metrics in these games. All other mobile games accounted for the remaining net increase of \$0.1 million. The decrease in other online game revenue of \$4.4 million was primarily attributable to a decrease in web revenue from *FarmVille 2* and *Zynga Poker* in the amounts of \$2.3 million and \$2.2 million, respectively, due to the overall decline in bookings and audience metrics in these games. All other web games accounted for the remaining net increase of \$0.1 million.

For the three months ended March 31, 2019, we recognized \$0.6 million of online game revenue and income from operations from changes in our estimated average playing period of payers that required adjusting the recognition period of deferred revenue generated in prior periods. Further, we recognized \$0.2 million of online game revenue and income from operations from games that have been discontinued as there is no further performance obligation. These changes in estimates did not impact our earnings per share for the three months ended March 31, 2019. For the three months ended March 31, 2018, we recognized \$0.4 million of online game revenue and income from operations from games that have been discontinued. This change in estimate did not impact our earnings per share for the three months ended March 31, 2018.

In the three months ended March 31, 2019, *Zynga Poker*, *Merge Dragons!*, and *CSR Racing 2*, were our top online revenue-generating games and comprised 15%, 14%, and 13%, respectively, of our online game revenue for the period. In the three months ended March 31, 2018, *Zynga Poker*, *CSR Racing 2* and *Hit It Rich! Slots* were our top online revenue-generating games and comprised 23%, 12% and 10%, respectively, of our online game revenue for the period. No other game generated more than 10% of online game revenue during either of these periods.

Consumable virtual items accounted for 34% of online game revenue in the three months ended March 31, 2019 and 46% of online game revenue in the same period of the prior year. Durable virtual items accounted for 66% of online game revenue in the three months ended March 31, 2019 and 54% of online game revenue in the same period of the prior year. The estimated weighted-average life of durable virtual items was nine months for both the three months ended March 31, 2019 and 2018.

Mobile advertising revenue increased \$20.5 million in the three months ended March 31, 2019 as compared to the same period of the prior year, while other advertising and other revenue decreased \$1.9 million, resulting in a net advertising and other increase of \$18.6 million.

The increase in mobile advertising revenue of \$20.5 million was primarily due to a \$17.1 million increase in mobile in-game display ads, primarily driven by ad inventory optimizations in our *Words with Friends* games, casual card games and the games recently acquired from Gram Games. Further, the increase in mobile advertising revenue from in-game display ads was supplemented by a higher average price per advertising unit, due a shift in our product mixture. The increase in mobile advertising revenue was also attributed to an increase in mobile in-game offers, engagement ads and other revenue of \$3.2 million, primarily driven by advertising revenue generated from recently acquired *Empires & Puzzles*, and an increase of \$0.2 million in mobile in-game sponsorships. The decrease in other advertising and other revenue of \$1.9 million was primarily due to a decrease in revenue of \$1.8 million from the completion of third party licensing agreements during the first quarter of 2018. The remaining decrease in other advertising and other revenue was due to a decrease in web advertising revenue of \$0.1 million.

International revenue as a percentage of total revenue was 35% in the three months ended March 31, 2019 and 2018.

Cost of revenue

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Cost of revenue	\$ 121,643	\$ 69,042	76%

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Cost of revenue increased \$52.6 million in the three months ended March 31, 2019 compared to the same period of the prior year. The increase was primarily attributable to increases of \$38.4 million in payment processing fees from bookings generated from mobile payment processors and \$13.3 million in intangible asset amortization driven by our Small Giant and Gram Games acquisitions.

Research and development

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Research and development	\$ 161,880	\$ 60,825	166%

Three Months Ended March 31, 2019 Compared to Three Months March 31, 2018

Research and development expenses increased \$101.1 million in the three months ended March 31, 2019 compared to the same period of the prior year. The increase was primarily attributable to increases of \$85.5 million in the fair value of the contingent consideration related to our Small Giant and Gram Games acquisitions, \$7.5 million in headcount-related expenses and \$3.1 million in stock-based compensation expense.

Sales and marketing

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Sales and marketing	\$ 102,011	\$ 50,855	101%

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Sales and marketing expenses increased \$51.2 million in the three months ended March 31, 2019 compared to the same period of the prior year. The increase was primarily attributable to increases of \$31.5 million and \$23.6 million in player acquisition costs related to the games acquired from Small Giant and Gram Games, respectively, partially offset by a decrease of \$6.7 million in player acquisition costs for other games.

General and administrative

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
General and administrative	\$ 21,504	\$ 23,253	(8)%

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

General and administrative expenses decreased \$1.7 million in the three months ended March 31, 2019 compared to the same period of the prior year. The decrease was primarily attributable to a benefit from the \$9.7 million net settlement of the derivative litigation, partially offset by \$7.4 million of Small Giant acquisition-related transaction costs.

Interest income

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Interest income	\$ 443	\$ 1,810	(76)%

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Interest income decreased \$1.3 million in the three months ended March 31, 2019 compared to the same period of the prior year. The decrease was primarily attributable a decline in the amount invested in short-term investments.

Other income (expense), net

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Other income (expense), net	\$ 2,112	\$ 3,401	(38)%

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

Other income (expense), net decreased \$1.3 million in the three months ended March 31, 2019 compared to the same period of the prior year. The decrease was primarily attributable to an increase in interest expense related to our \$100.0 million loan.

Provision for (benefit from) income taxes

	Three Months Ended March 31,		
	2019	2018	% Change
	(dollars in thousands)		
Provision for (benefit from) income taxes	\$ (10,252)	\$ 3,859	(366)%

Three Months Ended March 31, 2019 Compared to Three Months Ended March 31, 2018

The benefit from income taxes during the three months March 31, 2019 was \$10.3 million and the provision for income taxes during the three months ended March 31, 2018 was \$3.9 million, a net change of \$14.1 million. The net change was primarily attributable to a benefit generated from the post-acquisition statutory operating losses from Small Giant and Gram Games.

Liquidity and Capital Resources

	Three Months Ended March 31,	
	2019	2018
	(in thousands)	
Consolidated Statements of Cash Flows Data:		
Acquisition of property and equipment	\$ (5,058)	\$ (1,424)
Depreciation and amortization	21,080	7,731
Cash flows provided by (used in) operating activities	1,547	(3,947)
Cash flows provided by (used in) investing activities	(320,638)	10,979
Cash flows provided by (used in) financing activities	(7,761)	(42,597)

Our principal liquidity requirements are our lease commitments, licensing and marketing commitments, hosting commitments, capital expenditure needs, including strategic purchases and acquisitions, contingent consideration payments and any share repurchase activity we choose to effect. We expect to finance our operations through cash provided by operating activities and cash on hand. However, we cannot be certain that these sources will be sufficient to finance our operations, share repurchase activity or future growth through acquisitions, thus and we may seek additional financing in the future. As an example, we are actively evaluating the potential sale and leaseback of our San Francisco headquarters to increase our cash reserves in order to further invest in the growth of the Company. If we determine to proceed with the transaction, it is possible that such a transaction could take place as early as the second quarter of 2019.

As of March 31, 2019 and December 31, 2018, we had cash and cash equivalents of approximately \$199.7 million and \$545.0 million, respectively, which consisted of cash, money market funds and corporate debt securities.

Credit Facility and Covenant Discussion

In December 2018, the Company entered into a credit agreement (the "Credit Agreement") with Bank of America, N.A. that provides for a three-year revolving credit facility (the "Credit Facility") in an aggregate principal amount of up to \$200.0 million and is secured by a blanket lien on the Company's assets, excluding the Company's San Francisco corporate headquarters. The Credit Facility will reduce to \$150.0 million upon the earlier of (i) a sale of the Company's corporate headquarters or (ii) the first anniversary of the closing date, unless, within 90 days after such anniversary, the Company mortgages its corporate headquarters as collateral to secure the Credit Facility. The Company may borrow, repay and re-borrow funds under the Credit Agreement until the third anniversary of the closing date, at which time the Credit Facility will terminate, and all outstanding revolving loans, together with all accrued and unpaid interest, must be repaid. Finally, the Company may use the proceeds of future borrowings under the Credit Facility for general corporate purposes.

At the Company's option, revolving loans accrue interest at a per annum rate based on either (i) the base rate plus a margin ranging from 0.50% to 1.00%, determined based on the Company's consolidated leverage ratio for the four most recent fiscal quarters (the "Consolidated Leverage Ratio") or (ii) the LIBOR rate (for interest periods of one, two, three or six months) plus a margin ranging from 1.50% to 2.00%, determined based on the Company's Consolidated Leverage Ratio ("LIBOR Loan"). The base rate is defined as the highest of (i) the federal funds rate, plus 0.50%, (ii) Bank of America, N.A.'s prime rate and (iii) the LIBOR rate for a

1-month interest period plus 1.00%. The Company is also obligated to pay an ongoing commitment fee on undrawn amounts at a rate ranging from 0.25% to 0.35%, determined based on the Company's Consolidated Leverage Ratio.

On December 28, 2018, the Company drew against the Credit Facility for a \$100.0 million LIBOR Loan, with a three-month interest period at an interest rate of 4.31%. On March 28, 2019, the Company continued the \$100.0 million LIBOR loan for another three-month interest period, at an interest rate of 4.10%. The Company has an additional \$100.0 million of borrowing capacity remaining under the Credit Facility as of March 31, 2019.

The Credit Agreement also requires compliance with certain covenants, all of which the Company was in compliance with as of March 31, 2019. Specifically, we are subject to the following financial covenants (certain terms used and described below are as defined and described in the Credit Agreement):

- *Consolidated Interest Coverage Ratio:* Commencing as of the quarter ended March 31, 2019, the Company is obligated to maintain a consolidated interest coverage ratio of at least 4.00 to 1.00 as of the end of each fiscal quarter. The consolidated interest coverage ratio is measured by dividing (a) our consolidated EBITDA for the applicable measurement period by (b) the cash portion of our consolidated interest charges for the applicable measurement period.
- *Consolidated Leverage Ratio:* Commencing as of the quarter ended March 31, 2019, the Company is obligated to maintain a consolidated leverage ratio of at least 2.50 to 1.00 as of the end of each fiscal quarter. The consolidated leverage ratio is measured by dividing (a) our consolidated funded indebtedness as of the relevant fiscal quarter end by (b) our consolidated EBITDA for the applicable measurement period.
- *Liquidity Covenant:* Throughout the term of the Credit Facility, the Company is obligated to maintain liquidity of no less than \$200.0 million.

The Company was in compliance with all required covenants as of and for the three months ended March 31, 2019.

Share Repurchases

During 2018, we completed the 2016 Share Repurchase Program by repurchasing 18.2 million shares of our Class A common stock at a weighted-average price of \$3.59 per share for a total of \$65.4 million.

In April 2018, the 2018 Share Repurchase Program was authorized for up to \$200.0 million of our outstanding Class A common stock. During the three months ended March 31, 2019, no share repurchases were made and as of March 31, 2019, we have \$173.8 million remaining under the 2018 Share Repurchase Program.

Operating Activities

After our net loss of \$128.8 million is adjusted to exclude certain non-cash items, operating activities provided \$1.5 million of cash, cash equivalents and restricted cash during the three months ended March 31, 2019. Significant non-cash, cash equivalent or restricted cash items included depreciation and amortization of \$21.1 million and stock-based compensation expense of \$18.8 million. Depreciation and amortization increased by \$13.3 million primarily due to an increase in intangible asset amortization from our acquisitions in January 2019 and May 2018. Stock-based compensation expense increased \$4.7 million primarily due to our acquisition of Gram Games in May 2018. Further, the noncash expense associated with the increase in the Small Giant and Gram Games contingent consideration obligations drove an \$85.5 million change in our operating liabilities for the three months ended March 31, 2019.

The change in our operating assets and liabilities during the three months ended March 31, 2019 – excluding the impact from the aforementioned increase in our contingent consideration obligations – resulted in a \$24.4 million inflow of cash, cash equivalents and restricted cash, primarily due to a change in deferred revenue of \$86.5 million. The cash, cash equivalents and restricted cash inflow from the change in deferred revenue was primarily due to the acquisitions of Small Giant in January 2019 and strong bookings performance, primarily from Gram Games. This inflow was partially offset by outflows from accounts receivable, net and accounts payable of \$30.0 million and \$14.3 million, respectively. The cash, cash equivalents and restricted cash outflow from the change in accounts receivable net, was primarily driven by two months of outstanding accounts receivable from one of our largest payment processors and the outflow from the change in accounts payable was largely due to timing of payments.

Investing Activities

Investing activities used \$320.6 million of cash, cash equivalents and restricted cash during the three months ended March 31, 2019. The primary outflow of cash, cash equivalents and restricted cash associated with investing activities was \$299.4 million from our Small Giant acquisition and net purchases of investments of \$16.3 million.

Financing Activities

Financing activities used \$7.8 million of cash, cash equivalents and restricted cash during the three months ended March 31, 2019. The primary outflow of cash, cash equivalents and restricted cash associated with financing activities was \$11.0 million related to the taxes paid on behalf of employees related to the net settlement of equity awards.

Off-Balance Sheet Arrangements

We did not have any off-balance sheet arrangements during the three months ended March 31, 2019.

Contractual Obligations (1)

Year ending December 31:	Operating Leases	Licensor and Marketing	Other	Total
Remaining 2019	\$ 7,780	\$ 11,679	\$ 20,382	\$ 39,841
2020	9,611	42,328	20,165	72,104
2021	7,860	—	9,513	17,373
2022	3,898	—	—	3,898
2023	2,946	—	—	2,946
2024	179	—	—	179
Thereafter	—	—	—	—
Total	\$ 32,274	\$ 54,007	\$ 50,060	\$ 136,341

(1) The amounts represented in the table reflect our minimum cash obligations for the respective calendar years based on contractual terms, but not necessarily the periods in which they will be expensed in the Company's consolidated statement of operations.

Lease Commitments

Our lease commitments primarily consist of operating leases for our office facilities. We do not have any capital lease obligations, and all of our property and equipment has been purchased with cash.

Licensor and Marketing Commitments

Licensor commitments include minimum guarantee royalty payments due to licensors for use of their brands, properties and other licensed content in our games, as well as marketing commitments for specified spend related to our marketing products.

Other Commitments

Other commitments primarily include costs for hosting of data systems and other services. Excluded from other commitments is our uncertain income tax position liability of \$10.8 million, which includes interest and penalties, as the Company cannot make a reasonably reliable estimate of the period of cash settlement.

Tenant Improvement Obligations

Excluded from the contractual obligations table above are \$58.3 million of lease incentive obligations for tenant improvements associated with our San Francisco corporate headquarters. Of this amount, the Company has a current lease incentive obligation of \$43.8 million related to tenant improvements, which is reflected in other current liabilities in our consolidated balance sheet as of March 31, 2019. The remaining lease incentive commitments for tenant improvements of \$14.5 million are not reflected in our consolidated balance sheet as of March 31, 2019, as our obligation occurs once the tenant is provided access to the leased space.

Contingent Consideration Obligations

Under the terms of the Small Giant and Gram Games acquisition, contingent consideration may be payable based on the achievement of certain future performance targets during each annual period following the respective acquisition date for a total of three years, with no maximum limit as to the contingent consideration achievable. As of March 31, 2019, the estimated fair value of the contingent obligations for Small Giant and Gram Games were \$157.0 million and \$75.5 million, respectively.

Guarantees

During the third quarter of 2018, we executed an assignment of the Oxford office lease associated with our Q4 2017 restructuring plan. The original lease term ends in November 2022, with a lessee option to early terminate in November 2019. All terms under the original lease were assigned in full to the assignee, with the assignee becoming primarily liable to make rental payments directly to the landlord. Further, the assignee was required to provide the landlord a security deposit equal to twelve months rent, to be used by the landlord in the event of the assignee's non-performance.

In connection with the assignment, the Company became secondarily liable in the event the assignee is unable to perform under the lease. Based on the current rent and related payments, the maximum exposure to the Company is estimated to be \$2.2 million as of March 31, 2019. However, the lease is subject to periodic rate reviews which allow the landlord to make market adjustments to the rent and other related payments and accordingly, the maximum exposure may be greater than this amount. As of March 31, 2019, the fair value of this guarantee is not material.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts in our consolidated financial statements and related notes. Our significant accounting policies are described in Note 1 to our consolidated financial statements included in our previously-filed Annual Report on Form 10-K for the year ended December 31, 2018. We have identified below our critical accounting policies and estimates that we believe require the greatest amount of judgment. These estimates and judgments have a significant impact on our consolidated financial statements. Actual results could differ materially from those estimates. The accounting policies that reflect our more significant estimates and judgments and that we believe are the most critical to fully understand and evaluate our reported financial results include the following:

- Revenue recognition
- Income taxes
- Business combinations, including subsequent remeasurement of contingent consideration obligations
- Licenses and royalties

Please refer to Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in our Annual Report on Form 10-K for our fiscal year ended December 31, 2018 for a more complete discussion of our critical accounting policies and estimates.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

During the three months ended March 31, 2019, there were no significant changes to our quantitative and qualitative disclosures about market risk. Please refer to Part II, Item 7A. “Quantitative and Qualitative Disclosure About Market Risk” included in our Annual Report on Form 10-K for our fiscal year ended December 31, 2018 for a more complete discussion on the market risks we encounter.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report on Form 10-Q. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission (the “SEC”) rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Based on the evaluation of our disclosure controls and procedures as of March 31, 2019, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in management’s evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the quarter ended March 31, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

For a description of our material legal proceedings, see the section titled “Legal Matters” included in Note 15 —“Commitments and Contingencies” in Part I, Item I “Notes to Consolidated Financial Statements” of this Quarterly Report on Form 10-Q which is incorporated by reference herein.

ITEM 1A. RISK FACTORS

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition, results of operations or reputation. The risks described below are not the only risks we face. Additional risks not presently known to us or that we currently believe are not material may also significantly affect our business, financial condition, results of operations or reputation. Our business could be harmed by any of these risks. The trading price of our Class A common stock could decline due to any of these risks, and you may lose all or part of your investment. In assessing these risks, you should also refer to the other information contained in this Quarterly Report on Form 10-Q, including our consolidated financial statements and related notes.

We have marked with an asterisk () those risks described below that reflect changes from, or additions to, the risks described in our Annual Report on Form 10-K for the year-ended December 31, 2018.*

Risks Related to Our Business and Industry

Our business will suffer if we are unable to entertain our players, develop new games, improve the experience of our existing games, and successfully monetize our games.

Our business depends on developing, publishing and continuing to service “free-to-play” games that consumers will download and spend time and money playing. We are primarily focused on mobile gaming, offering our games on mobile devices, including smartphones and tablets on Apple’s iOS and Google’s Android operating systems, and on social networking platforms such as Facebook. We have devoted and we expect to continue to devote substantial resources to the research, development, analytics and marketing of our games. Our development and marketing efforts are focused on both improving the experience of our existing games (frequently through new content and feature releases for our live services) and developing new games. We generate revenue primarily through the sale of in-game virtual items and advertising. For games distributed through third-party platforms, we are required to share a portion of our revenues from in-game sales with the platform providers. Due to our focus on mobile gaming, these costs are expected to remain a significant operating expense. In order to remain profitable, we need to generate sufficient bookings and revenues from our existing and new game offerings to offset our ongoing development, marketing and operating costs.

Successfully monetizing “free-to-play” games is difficult, and requires that we deliver valuable and entertaining player experiences that a sufficient number of players will pay for or we are able to otherwise sufficiently monetize our games (for example, by serving in-game advertising). The success of our games depends, in part, on unpredictable and volatile factors beyond our control including consumer preferences, competing games, new mobile platforms and the availability of other entertainment experiences. If our games do not meet consumer expectations, or if they are not brought to market in a timely and effective manner, our ability to grow revenue and our financial performance will be negatively affected.

We focus our efforts on four categories: Action Strategy, Casual, Invest Express and Social Casino. In addition to the market factors noted above, our ability to successfully develop games for mobile platforms and their ability to achieve commercial success will depend on our ability to:

- effectively market our games to existing and new players;
- achieve benefits from our player acquisition costs;
- achieve viral organic growth and gain customer interest in our games through free or more efficient channels;
- adapt to changing player preferences;
- adapt to new technologies and feature sets for mobile and other devices (for example, in 2017 we incurred expenses related to upgrading games to support Apple’s iPhoneX and releasing new features in *CSR Racing 2* using Apple’s ARKit platform);
- expand and enhance games after their initial release;
- attract, retain and motivate talented and experienced game designers, product managers and engineers;
- partner with mobile platforms and obtain featuring opportunities;

- continue to adapt game feature sets for an increasingly diverse set of mobile devices, including various operating systems and specifications, limited bandwidth, and varying processing power and screen sizes;
- minimize launch delays and cost overruns on the development of new games and features;
- achieve and maintain successful customer engagement and effectively monetize our games;
- maintain a quality social game experience and retain our players;
- develop games that can build upon or become franchise games;
- compete successfully against a large and growing number of existing market participants;
- accurately forecast the timing and expense of our operations, including game and feature development, marketing and customer acquisition, customer adoption, and success of bookings growth;
- minimize and quickly resolve bugs or outages; and
- acquire and successfully integrate high quality mobile game assets, personnel or companies.

These and other uncertainties make it difficult to know whether we will succeed in continuing to develop successful live service games and launch new games and features in accordance with our operating plan. If we do not succeed in doing so, our business, financial condition, results of operations or reputation will suffer.

Our industry is intensely competitive and subject to rapid changes. If consumers prefer our competitors' products or services over our own, our operating results could suffer.

Competition in the gaming industry, especially the mobile gaming segment, is intense and subject to rapid changes, including changes from evolving consumer preferences and emerging technologies. Many new games are introduced in each major industry segment (mobile, web, PC, and console), but only a relatively small number of titles account for a significant portion of total revenue in each segment. Our competitors that develop mobile and web games vary in size and include companies such as Activision Blizzard (the parent company of King Digital), Aristocrat, DoubleU, Electronic Arts (EA Mobile), Epic Games, Glu Mobile, Jam City, Machine Zone, Netmarble (the parent company of Kabam), NetEase (NetEase Games), Niantic, Peak Games, Playtika, SciPlay, Supercell, Take-Two Interactive Software, Vivendi (the parent company of Gameloft) and others. In addition, online game developers and distributors who are primarily focused on specific international markets, such as Giant Interactive and Tencent in Asia, and high-profile companies with significant online presences that to date have not actively focused on social games, such as Facebook, Apple, Google, Amazon and Microsoft, may decide to develop social games. Some of these current and potential competitors have significant resources for developing or acquiring additional games, may be able to incorporate their own strong brands and assets into their games, have a more diversified set of revenue sources than we do and may be less severely affected by changes in consumer preferences, regulations or other developments that may impact our industry.

As there are relatively low barriers to entry to develop a mobile or online game, we expect new game competitors to enter the market and existing competitors to allocate more resources to develop and market competing games and applications. We also compete or will compete with a vast number of small companies and individuals who are able to create and launch games and other content for devices and platforms using relatively limited resources and with relatively limited start-up time or expertise. The proliferation of titles in these open developer channels makes it difficult for us to differentiate ourselves from other developers and to compete for players without substantially increasing our marketing expenses and development costs. As an entertainment company, we also face competition for the leisure time, attention and discretionary spending of our players from other non-gaming activities, such as social media and messaging applications, personal computer and console games, video streaming services, television, movies, sports and the Internet. Increasing competition could result in loss of players, increasing player acquisition and retention costs, and loss of talent, all of which could harm our business, financial condition or results of operations.

We rely on third-party platforms such as the Apple App Store, the Google Play Store and Facebook to distribute our games and collect revenue. If we are unable to maintain a good relationship with such platform providers, if their terms and conditions or pricing changed to our detriment, if we violate, or if a platform provider believes that we have violated, the terms and conditions of its platform, or if any of these platforms loses market share or falls out of favor or is unavailable for a prolonged period of time, our business will suffer.

We derive a significant portion of our bookings from distribution of our games on the Apple App Store, the Google Play Store, and Facebook and the virtual items we sell in our games are purchased using the payment processing systems of these platform providers. Additionally, we have historically acquired a significant number of our players through Facebook. In the three months ended March 31, 2019, we derived 51% of our revenue and 49% of our bookings on Apple platforms, 40% of our revenue and 45% of our bookings on Google platforms and 7% of our revenue and 5% of our bookings on Facebook platforms.

We are subject to the standard policies and terms of service of third-party platforms, which govern the promotion, distribution, content and operation generally of games on the platform. Each platform provider has broad discretion to change and interpret its terms of service and other policies with respect to us and other developers, and those changes may be unfavorable to us. For example, in 2018 our *Zynga Poker* audience was impacted by platform changes made by Facebook which impacted the players' ability to access and log into the game. A platform provider may also change its fee structure, add fees associated with access to and use of its platform, alter how we are able to advertise on the platform, change how the personal information of its users is made available to application developers on the platform, limit the use of personal information for advertising purposes, or restrict how players can share information with their friends on the platform or across platforms. For example, in December 2017, Apple revised its App Store Guidelines to require the disclosure of the odds of receiving certain types of virtual items from "loot boxes" (or similar mechanisms that offer a paid license to randomized virtual items) before customers purchase a license for the virtual items. We are continuing to evaluate how Apple will interpret this revision, whether Google, Facebook and other platform providers adopt similar rules, and how this rule may affect our business, operations and financial results.

In addition, third-party platforms also impose certain file size limitations, which may limit the ability of players to download some of our larger games in over-the-air updates. Aside from these over-the-air file size limitations, a larger game file size could cause players to delete our games once the file size grows beyond the capacity of their devices' storage limitations or could reduce the number of downloads of these games.

Such terms of use changes may decrease the visibility or availability of our games, limit our distribution capabilities, prevent access to our existing games, reduce the amount of bookings and revenue we may recognize from in-game purchases, increase our costs to operate on these platforms or result in the exclusion or limitation of our games on such platforms. Any such changes could adversely affect our business, financial condition or results of operations.

If we violate, or a platform provider believes we have violated, its terms of service (or if there is any change or deterioration in our relationship with these platform providers), that platform provider could limit or discontinue our access to the platform. A platform provider could also limit or discontinue our access to the platform if it establishes more favorable relationships with one or more of our competitors or it determines that we are a competitor. Any limit or discontinuation of our access to any platform could adversely affect our business, financial condition or results of operations.

We also rely on the continued popularity, customer adoption, and functionality of third-party platforms. In the past, some of these platform providers have been unavailable for short periods of time or experienced issues with their in-app purchasing functionality. If either of these events recurs on a prolonged, or even short-term, basis or other similar issues arise that impact players' ability to access our games, access social features or purchase a license to virtual items, our business, financial condition, results of operations or reputation may be harmed.

We rely on third-party hosting and cloud computing providers, like Amazon Web Services ("AWS"), to operate certain aspects of our business. A significant portion of our game traffic is hosted by a single vendor, and any failure, disruption or significant interruption in our network or hosting and cloud services could adversely impact our operations and harm our business.

Our technology infrastructure is critical to the performance of our games and to player satisfaction, as well as our corporate functions. Our games and company systems run on a complex distributed system, or what is commonly known as cloud computing. We own, operate and maintain elements of this system, but significant elements of this system are operated by third-parties that we do not control and which would require significant time and expense to replace. We expect this dependence on third-parties to continue. We have suffered interruptions in service in the past, including when releasing new software versions or bug fixes, and if any such interruption were significant and/or prolonged it could adversely affect our business, financial condition, results of operations or reputation.

In particular, a significant portion, if not almost all, of our game traffic, data storage, data processing and other computing services and systems is hosted by AWS. AWS provides us with computing and storage capacity pursuant to an agreement that continues until terminated by either party. The agreement requires AWS to provide us their standard computing and storage capacity and related support in exchange for timely payment by us. We have experienced, and may in the future experience, disruptions, outages and other performance problems due to a variety of factors, including infrastructure changes, human or software errors and capacity constraints. If a particular game is unavailable when players attempt to access it or navigation through a game is slower than they expect, players may stop playing the game and may be less likely to return to the game as often, if at all.

Any failure, disruption or interference with our use of hosted cloud computing services and systems provided by third-parties, like AWS, could adversely impact our business, financial condition or results of operations. To the extent we do not effectively respond to any such interruptions, upgrade our systems as needed and continually develop our technology and network architecture to accommodate traffic, our business, financial condition or results of operations could be adversely affected. In addition, we do not maintain insurance policies covering losses relating to our systems and we do not have business interruption insurance. Furthermore, our disaster recovery systems and those of third-parties with which we do business may not function as intended or may fail to adequately protect our critical business information in the event of a significant business interruption, which may cause interruption in service of our games, security breaches or the loss of data or functionality, leading to a negative effect on our business, financial condition or results of operations.

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

Our bookings, revenue, player metrics and operating results have fluctuated in the past and could vary significantly from quarter-to-quarter and year-to-year, and may fail to match our past performance or the expectations of securities analysts or investors because of a variety of factors, some of which are outside of our control. Factors that may contribute to the variability of our operating results include the risk factors listed in these “Risk Factors” and the factors discussed in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Factors Affecting Our Performance.”

In particular, it is difficult to predict if, or when, bookings from one of our games will begin to decline, the decay rate for any particular game (i.e., the speed at which the popularity and player usage for a game declines) and the commercial success of our new games and features. The success of our business depends on our ability to consistently and timely launch new games and features that achieve significant popularity and have the potential to become franchise games as bookings from our older games decline. It is difficult for us to predict with certainty when we will launch a new game as games may require longer development schedules or soft launch periods to meet our quality standards and our players’ expectations. If decay rates are higher than expected in a particular quarterly period and/or we experience delays in the launch of new games that we expect to offset decay rates of other games and/or new games do not monetize well, we may not meet our expectations or the expectations of securities analysts or investors for a given quarter.

In addition, we recognize revenue from the sale of our virtual items in accordance with U.S. GAAP, which is complex and based on our assumptions and historical data with respect to the sale and use of various types of virtual items. In the event of changes in our assumptions or new trends in the mix of virtual items sold, the amount of revenue that we recognize in any particular period may fluctuate significantly. In addition, changes in the policies of Facebook, Apple, Google or other third party platforms or accounting policies promulgated by the SEC and national accounting standards bodies affecting software and virtual items revenue recognition could further significantly affect the way we report revenue related to our products. Such changes could have an adverse effect on our reported revenue, net income and earnings per share under U.S. GAAP. For example, recurring activity such as new game launches, our acquisition of games from a third party or periods of significant increased bookings can also result in increases in deferred revenue while we initially defer bookings over the estimated average playing period of payers. For further information regarding our revenue recognition policy, see the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies—Revenue Recognition”.

Given the rapidly evolving social game industry in which we operate, our historical operating results may not be useful in predicting our future operating results. In addition, metrics we have developed or those available from third parties regarding our industry and the performance of our games, including Mobile DAUs, Mobile MAUs, Mobile MUUs, Mobile MUPs and Mobile ABPU may not be indicative of our future financial performance.

Our business will suffer if we are unable to successfully acquire or integrate acquired companies into our business or otherwise manage the growth associated with multiple acquisitions.

We have acquired games, businesses, personnel and technologies in the past, and we intend to continue to evaluate and pursue acquisitions and strategic investments. For example, in the fourth quarter of 2017, we acquired the casual card game division of Peak Games, in the second quarter of 2018, we acquired Gram Games, and in early 2019, we acquired a controlling interest in Small Giant. Each of these acquisitions require unique approaches to integration due to, among other reasons, the structure of the acquisitions, their locations and cultural differences among their teams and ours, and has required, and will continue to require, attention from our management team. If we are unable to obtain the anticipated benefits from these acquisitions and strategic investments, or we encounter difficulties in integrating their operations with ours, our financial condition and results of operations could be materially harmed.

Challenges and risks from such investments and acquisitions include:

- negative effects on products and product pipeline from the changes and potential disruption that may follow the acquisition;
- diversion of our management's attention;
- declining employee morale and retention issues resulting from changes in compensation, or changes in management, reporting relationships, or future prospects;
- the need to integrate the operations, systems, technologies, products and personnel of each acquired company, the inefficiencies and lack of control that may result if such integration is delayed or not implemented, and unforeseen difficulties and expenditures that may arise in connection with integration;
- the difficulty in determining the appropriate purchase price of acquired companies may lead to the overpayment from certain acquisitions and the potential impairment of intangible assets and goodwill acquired in the acquisitions;
- the difficulty in successfully evaluating and utilizing the acquired products, technology or personnel;
- the potential incurrence of debt, contingent liabilities, amortization expenses or restructuring charges in connection with any acquisition;
- the need to implement controls, procedures and policies appropriate for a larger public company at companies that prior to acquisition may not have as robust controls, procedures and policies;
- the difficulty in accurately forecasting and accounting for the financial impact of an acquisition transaction, including accounting charges and integrating and reporting results for acquired companies that have not historically followed U.S. GAAP;
- the fact that we may be required to pay contingent consideration in excess of the initial fair value, and contingent consideration may become payable at a time when we do not have sufficient cash available to pay such consideration;
- under purchase accounting, we may be required to write off deferred revenue which may impair our ability to recognize revenue that would have otherwise been recognizable which may impact our financial performance or that of the acquired company;
- risks associated with our expansion into new international markets and doing business internationally, including those described under the risk factor caption "Our international operations are subject to increased challenges and risks";
- in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries;
- the need to transition operations and players onto our existing or new platforms and the potential loss of, or harm to, our relationships with employees, players and other suppliers as a result of integration of new businesses;
- the implications of our management team balancing levels of oversight over acquired businesses which continue their operations under earnout provisions in acquisition agreements;
- our dependence on the accuracy and completeness of statements and disclosures made or actions taken by the companies we acquire or their representatives, when conducting due diligence and evaluating the results of such due diligence; and
- liability for activities of the acquired company before the acquisition, including intellectual property and other litigation claims or disputes, information security vulnerabilities, violations of laws, rules and regulations, commercial disputes, tax liabilities and other known and unknown liabilities.

The benefits of an acquisition or investment may also take considerable time to develop, and we cannot be certain that any particular acquisition or investment will produce the intended benefits, which could adversely affect our business, financial condition or results of operations. Our ability to grow through future acquisitions will depend on the availability of suitable acquisition and investment candidates at an acceptable cost, our ability to compete effectively to attract these candidates and the availability of financing to complete larger acquisitions. Acquisitions could result in potential dilutive issuances of equity securities, use of significant cash balances or incurrence of debt (and increased interest expense), contingent liabilities or amortization expenses related to intangible assets or write-offs of goodwill and/or intangible assets, which could adversely affect our results of operations and dilute the economic and voting rights of our stockholders. For more information, see Note 8 – "Goodwill and Other Intangible Assets, Net" in the notes to the consolidated financial statements included herein.

A small number of games have generated a majority of our revenue, and we must continue to launch, innovate and enhance games that players like and attract and retain a significant number of players in order to grow our revenue and sustain our competitive position.

Historically, we have depended on a small number of games for a majority of our revenue and we expect that this dependency will continue for the foreseeable future. Bookings and revenue from many of our games may decline over time after reaching a peak of popularity and player usage. As a result, our business depends on our ability to engage with players by consistently and timely launching new games and enhancing existing games with new content, features and events. We believe that certain games have the potential to become franchises that we plan to invest in and support with new games releases and introduction of new features to existing games (such as new events within *Zynga Poker*, *Merge Dragons!* and *Empires & Puzzles*). Constant game enhancement requires the investment of significant resources, particularly with older games, and such costs on average have increased.

It is difficult to consistently anticipate player demand on a large scale, particularly as we develop games in new categories or new markets, including international markets and mobile platforms. If we do not successfully launch games that attract and retain a significant number of players and extend the life of our existing games, our market share, brand and financial results will be harmed.

We rely on a small portion of our total players for nearly all of our revenue and if we fail to grow our player base, or if player engagement continues to decline, bookings, revenue and operating results will be harmed.

Compared to all players who play our games in any period, only a small portion are paying players. In the first quarter of 2019, we had approximately 1.4 million average Mobile MUPs (excluding payers of *Solitaire*, our Facebook Instant Games and games acquired as part of our Gram Games and Small Giant acquisitions), who represented approximately 3.3% of our average Mobile Monthly Unique Users. In order to sustain and grow our revenue levels, we must attract, retain and increase the number of paying players or more effectively monetize our players through advertising and other strategies. To retain players, we must devote significant resources so that the games they play retain their interest and attract them to our other games. We might not succeed in our efforts to increase the monetization rates of our users, particularly if we are unable to retain our paying players. If we fail to grow or sustain the number of our paying players, if the rates at which we attract and retain paying players declines or if the average amount our players pay declines, our business may not grow and our financial results will suffer.

The value of our virtual items is highly dependent on how we manage the economies in our games. If we fail to manage our game economies properly, our business may suffer.

Paying players purchase a license to virtual items in our games because of the perceived value of these goods, which is dependent on the relative ease of obtaining an equivalent good by playing our game. The perceived value of these virtual items can be impacted by various actions that we take in the games including offering discounts for virtual items, giving away virtual items in promotions or providing easier non-paid means to secure these goods. Managing game economies is difficult, and relies on our assumptions and judgement. If we fail to manage our virtual economies properly or fail to promptly and successfully respond to any such disruption, our reputation may suffer and our players may be less likely to play our games and to purchase virtual items from us in the future, which would cause our business, financial condition and results of operations to suffer.

Our revenue may be harmed by the proliferation of “cheating” programs and scam offers that seek to exploit our games and players, which may negatively affect game-playing experience and our ability to reliably validate our audience metric reporting and may lead players to stop playing our games.

Unrelated third parties have developed, and may continue to develop, “cheating” programs that enable players to exploit vulnerabilities in our games, play them in an automated way, collude to alter the intended game play or obtain unfair advantages over other players who do play fairly. These programs harm the experience of players who play fairly, may disrupt the virtual economies of our games and reduce the demand for virtual items, disrupting our in-game economy. In addition, unrelated third parties have attempted to scam our players with fake offers for virtual items or other game benefits. We devote significant resources to discover, discourage and disable these cheating and scam programs and activities. If we are unable to do so quickly, our operations may be disrupted, our reputation may be damaged, players may stop playing our games and our ability to reliably validate our audience metrics may be negatively affected. These cheating programs and scam offers result in lost revenue from paying players, disrupt our in-game economies, divert time from our personnel, increase costs of developing technological measures to combat these programs and activities, increase our customer service costs needed to respond to dissatisfied players, and may lead to legal claims.

Some of our players may make sales or purchases of virtual items used in our games through unauthorized or fraudulent third-party websites, which may reduce our revenue.

Virtual items in our games have no monetary value outside of our games. Nonetheless, some of our players may make sales and/or purchases of our virtual items, such as virtual coins for our Social Slots franchise games or *Zynga Poker* virtual poker chips, through unauthorized third-party sellers in exchange for real currency. These unauthorized or fraudulent transactions are usually arranged on third-party websites and the virtual items offered may have been obtained through unauthorized means such as exploiting vulnerabilities in our games, from scamming our players with fake offers for virtual items or other game benefits, or from credit card fraud. We do not generate any revenue from these transactions. These unauthorized purchases and sales from third-party sellers have in the past and could in the future impede our revenue and profit growth by, among other things:

- decreasing revenue from authorized transactions;
- creating downward pressure on the prices we charge players for our virtual currency and virtual items;
- increasing chargebacks from unauthorized credit card transactions;
- causing us to lose revenue from dissatisfied players who stop playing a particular game;
- causing us to lose revenue from players who we take disciplinary action against, including banning certain players who may have previously made purchases within our games;
- increasing costs we incur to develop technological measures to curtail unauthorized transactions;
- resulting in negative publicity or harm our reputation with players and partners; and
- increasing customer support costs to respond to dissatisfied players.

To discourage unauthorized purchases and sales of our virtual items, we state in our terms of service that the buying or selling of virtual currency and virtual items from unauthorized third party sellers may result in bans from our games or legal action. With a community of players in the millions, we periodically encounter such issues and expect to continue to do so. We have banned players as a result of such activities. We have also filed lawsuits against third parties attempting to “sell” virtual items from our games, particularly poker chips from *Zynga Poker*, outside of our games. We have also employed technological measures to help detect unauthorized transactions and continue to develop additional methods and processes by which we can identify unauthorized transactions and block such transactions. However, there can be no assurance that our efforts to prevent or minimize these unauthorized or fraudulent transactions will be successful and that these actions will not increase over time.

We are subject to laws and regulations concerning privacy, information security, data protection, consumer protection and protection of minors, and these laws and regulations are continually evolving. Our actual or perceived failure to comply with these laws and regulations could harm our business.

We receive, store and process personal information and other player data, and we enable our players to share their personal information with each other and with third parties, including on the Internet and mobile platforms. There are numerous federal, state and local laws around the world regarding privacy and the storing, sharing, use, processing, disclosure and protection of personal information and other player data on the Internet and mobile platforms, the scope of which are changing, subject to differing interpretations, and may be inconsistent between countries or conflict with other rules.

Various government and consumer agencies have called for new regulation and changes in industry practices and are continuing to review the need for greater regulation for the collection of information concerning consumer behavior on the Internet, including regulation aimed at restricting certain targeted advertising practices. For example, the European Union’s General Data Protection Regulation (“GDPR”), which became effective in May 2018, creates new individual privacy rights and imposes worldwide obligations on companies processing personal data of European Union users, which has created a greater compliance burden for us and other companies with European users, and subjects violators to substantial monetary penalties. Another example is the State of California’s passage of the California Consumer Protection Act of 2018 (“CCPA”), which will become effective in 2020 and will create new privacy rights for consumers residing in the state. There is also increased attention being given to the collection of data from minors. For instance, the Children’s Online Privacy Protection Act (“COPPA”) requires companies to obtain parental consent before collecting personal information from children under the age of 13. Compliance with GDPR, CCPA, COPPA and similar legal requirements has required us to devote significant operational resources and incur significant expenses.

All of our games are subject to our privacy policy and our terms of service located in application storefronts, within our games and on our corporate website. We generally comply with industry standards and are subject to the terms of our privacy-related obligations to players and third parties. We strive to comply with all applicable laws, policies, legal obligations and certain industry codes of conduct relating to privacy and data protection, to the extent reasonably attainable. However, it is possible that these obligations may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices. For example, foreign laws and regulations are often more restrictive than those in the U.S. In particular, the European Union and its member states traditionally have taken broader views regarding what data types are subject to data protection, and have imposed legal obligations on companies in this regard, as is the case with GDPR. It is also possible that new laws, policies, legal obligations or industry codes of conduct may be passed, or existing laws, policies, legal obligations or industry codes of conduct may be interpreted in such a way that could prevent us from being able to offer services to citizens of a certain jurisdiction or may make it costlier or more difficult for us to do so. Any failure or perceived failure by us to comply with our privacy policy and terms of service, our privacy-related obligations to players or other third parties, or our privacy-related legal obligations, or any compromise of security that results in the unauthorized release or transfer of personally identifiable information or other player data, may result in governmental enforcement actions, litigation or public statements against us by consumer advocacy groups or others and could cause our players to lose trust in us, which could have an adverse effect on our business, financial condition or results of operations. Additionally, if third parties we work with, such as players, vendors or developers violate applicable laws or our policies, such violations may also put our players' information at risk and could in turn have an adverse effect on our business, financial condition or results of operations.

Cybersecurity attacks, including breaches, computer viruses and computer hacking attacks could harm our business, financial condition, results of operations or reputation.

Cybersecurity attacks, including breaches, computer malware and computer hacking have become more prevalent in our industry. Any cybersecurity breach caused by hacking, which involves efforts to gain unauthorized access to information or systems, or to cause intentional malfunctions or loss or corruption of data, software, hardware or other computer equipment, or the inadvertent transmission of computer viruses could adversely affect our business, financial condition, results of operations or reputation. We have experienced and will continue to experience hacking attacks of varying degrees from time to time, including denial-of-service attacks. Because of our prominence in the social game industry, we believe we are a particularly attractive target for hackers.

In addition, we store sensitive information, including personal information about our employees, and our games involve the storage and transmission of players' personal information on equipment, networks and corporate systems run by us or managed by third-parties including Facebook, Apple, Microsoft, Amazon, and Google. We are subject to a number of laws, rules and regulations requiring us to provide notification to players, investors, regulators and other affected parties in the event of a security breach of certain personal data, or requiring the adoption of minimum information security standards that are often vaguely defined and difficult to practically implement. The costs of compliance with these laws have increased and may increase in the future. Our corporate systems, third-party systems and security measures may be breached due to the actions of outside parties, employee error, malfeasance, a combination of these, or otherwise, and, as a result, an unauthorized party may obtain access to our data, our employees' data, our players' data or any third party data we may possess. Any such security breach could require us to comply with various breach notification laws and may expose us to litigation, remediation and investigation costs, increased costs for security measures, loss of revenue, damage to our reputation and potential liability.

If we do not successfully invest in, establish and maintain awareness of our brand and games, if we incur excessive expenses promoting and maintaining our brand, or our games or if our games contain defects or objectionable content, our business, financial condition, results of operations or reputation could be harmed.

We believe that establishing and maintaining our brand is critical to maintaining and creating favorable relationships with players, platform providers, advertisers and content licensors, as well as competing for key talent. Increasing awareness of our brand and recognition of our games is particularly important in connection with our strategic focus on developing games based on our own intellectual property and successfully cross-promoting our games. In addition, globalizing and extending our brand and recognition of our games requires significant investment and extensive management time to execute successfully. Although we make significant sales and marketing expenditures in connection with the launch of our games, these efforts may not succeed in increasing awareness of our brand or the new games. If we fail to increase and maintain brand awareness and consumer recognition of our games, our potential revenues could be limited, our costs could increase and our business, financial condition, results of operations or reputation could suffer.

In addition, if a game contains objectionable content or the messaging functionality of our games is abused, we could experience damage to our reputation and brand. Despite reasonable precautions, some consumers may be offended by certain of our game content, the third-party advertisements displayed in certain of our games, or by treatment of other users. If consumers believe that a game we published or third-party advertisement displayed in a game contains objectionable content, it could harm our brand and consumers could refuse to play it and could pressure the platform providers to remove the game from their platforms. For example, we

rely on third-party advertising partners to display ads within our games, we have experienced (and may experience in the future) instances where offensive or objectionable content has been displayed in our games through our advertising partners. While this may violate the terms of our agreements with these advertising partners, our reputation and player experience may suffer. Furthermore, steps that we may take in response to such instances, such as temporarily or permanently shutting off access of such advertising partner to our network, may negatively impact our revenue in such period.

Similarly, our games may contain errors, bugs, flaws, corrupted data, defects and other vulnerabilities, some of which may only become apparent after their launch, particularly as we launch new games and rapidly release new features to existing games under tight time constraints. Any such errors, flaws, defects and vulnerabilities may be exploited by cheating programs and other forms of misappropriation, disrupt our operations, adversely affect the game experience of our players, harm our reputation, cause our players to stop playing our games, divert our resources and delay market acceptance of our games, any of which could result in legal liability to us or harm our business, financial condition or results of operations.

If we are able to develop new games and features that achieve success, it is possible that these games and features could divert players of our other games without growing our overall user base, which could harm operating results.

Although it is important to our future success that we develop new games and features that are popular with players, it is possible that new games and features may reduce the amount of time players spend with our other games. In particular, we plan to continue leveraging our existing games to cross-promote new games and features, which may encourage players of existing games to divert some of their playing time and discretionary spending away from our existing games. If new games and game features do not grow our player base, increase the overall amount of time our players spend with our games, or generate sufficient new bookings to offset any declines from our other games, our bookings and revenue could be adversely affected.

We derive a significant portion of our revenues from advertisements and offers that are incorporated into our free-to-play games through relationships with third parties. If we are unable to continue to compete for these advertisements and offers, or if any events occur that negatively impact our relationships with advertisers, our advertising revenues and operating results would be negatively impacted.

We derive a significant portion of our revenues through advertisements and offers we serve to players. We need to maintain good relationships with advertisers to provide us with a sufficient inventory of advertisements and offers. Online advertising, including through mobile games and other mobile applications, is an intensely competitive industry. Many large companies, such as Amazon, Facebook and Google, invest significantly in data analytics to make their websites and platforms more attractive to advertisers. In order for our advertising business to continue to succeed, we need to continue to demonstrate the reach of our player network and success of our advertising partners. If our relationship with any advertising partners terminates for any reason, or if the commercial terms of our relationships are changed or do not continue to be renewed on favorable terms, we would need to qualify new advertising partners, which could negatively impact our revenues, at least in the short term.

In addition, internet-connected devices and operating systems controlled by third parties increasingly contain features that allow device users to disable functionality that allows for the delivery of advertising on their devices. Device and browser manufacturers may include or expand these features as part of their standard device specifications. For example, when Apple announced that UDID, a standard device identifier used in some applications, was being superseded and would no longer be supported, application developers were required to update their apps to utilize alternative device identifiers such as universally unique identifier, or, more recently, identifier-for-advertising, which simplify the process for Apple users to opt out of behavioral targeting. If users elect to utilize the opt-out mechanisms in greater numbers, our ability to deliver effective advertising campaigns on behalf of our advertisers would suffer, which could cause our business, financial condition, or results of operations to suffer. Finally, the revenues that we derive from advertisements and offers is subject to seasonality, as companies' advertising budgets are generally highest during the fourth quarter and decline significantly in the first quarter of the following year, which negatively impacts our revenues in the first quarter.

We have a history of net losses and our revenue, bookings and operating margins may decline. We also may incur substantial net losses in the future and may not achieve or sustain profitability.

The industry in which we operate is highly competitive and rapidly changing, and relies heavily on successful new product launches and continually introducing compelling content, products and services. As such, if we fail to deliver such content, products and services, do not execute our strategy successfully or if our new content launches are delayed, our revenue, bookings and audience numbers may decline, and our operating results will suffer. As of March 31, 2019, we had an accumulated deficit of \$1.9 billion.

In addition, our operating margin may experience downward pressure as a result of increasing competition and the other risks discussed in this report. We expect to continue to expend substantial financial and other resources on game development, our technology stack, game engines, game technology and tools, the expansion of our network, international expansion and marketing. Our operating costs will increase and our operating margins may decline if we do not effectively manage costs, launch new products on schedule that monetize successfully and enhance our franchise games so that these games continue to monetize successfully. In addition, weak economic conditions or other factors could cause our business to further contract, requiring us to implement significant additional cost cutting measures, including a decrease in research and development and sales and marketing, which could harm our long-term prospects.

If our revenues do not increase to offset any additional expenses, if we fail to manage or experience unexpected increases in operating expenses or if we are required to take additional charges related to impairments or restructurings, our financial results and results of operations may suffer.

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

Certain of our key metrics, including Mobile DAUs, Mobile MAUs, Mobile MUUs, Mobile MUPs, and Mobile ABPU are calculated using data tracked by our internal analytics systems based on tracking activity of user accounts. The analytics systems and the resulting data have not been independently verified. While these numbers are based on what we believe to be reasonable calculations for the applicable period of measurement, there are inherent challenges in measuring usage and user engagement across our user base and our recently acquired operations, and factors relating to user activity and systems may impact these numbers. For example, although we now only report Mobile DAUs and Mobile MAUs, for the fourth quarter of 2018, we excluded December web DAUs and MAUs for *Zynga Poker* and instead used an average *Zynga Poker* player activity for October and November 2018 due to an increased volume of apparent, web-based player activity in that game that we were unable to reliably validate and de-duplicate. The calculation of our key metrics and examples of how user activity and our systems may impact the calculation of these metrics is described in detail under the heading titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Measures and Metrics.”

Our accuracy in calculating these metrics is further challenged by our focus on mobile gaming. As described under the heading titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Key Measures and Metrics,” we rely on the accuracy and transparency of data provided by individuals and reported by third parties to calculate our metrics and eliminate duplication of data. For purposes of calculating Mobile MUUs and Mobile MUPs, for certain periods, we are unable to distinguish whether players of certain games are also players of our other games. As a result, we exclude players of these games from our calculation of Mobile MUUs and Mobile MUPs for those periods to avoid potential double counting.

Our advertisers and investors rely on our key metrics as a representation of our performance. We regularly review and may adjust our processes for calculating our internal metrics to improve their accuracy. If we determine that we can no longer calculate any of our key metrics with a sufficient degree of accuracy, and we cannot find an adequate replacement for the metric, our business, financial condition or results of operations may be harmed. In addition, if advertisers, platform partners or investors do not perceive our user metrics to be accurate representations of our user base or user engagement, or if we discover material inaccuracies in our user metrics, our reputation may be harmed and advertisers and platform partners may be less willing to allocate their budgets or resources to our products and services, which could negatively affect our business, financial condition or results of operations.

Any restructuring actions and cost reduction initiatives that we undertake may not deliver the expected results and these actions may adversely affect our business.

We have implemented a number of restructurings during the last several years in which we implemented certain restructuring actions and cost reduction initiatives to streamline operations and improve cost efficiencies to better align our operating expenses with our revenue, including reducing our headcount, rationalizing our product pipeline, reducing marketing and technology expenditures and consolidating and closing certain facilities. We plan to continue to manage costs to better and more efficiently manage our business. Our restructuring plans and other such efforts could result in disruptions to our operations and adversely affect our business, financial condition or results of operations.

We actively monitor our costs, however, if we do not fully realize or maintain the anticipated benefits of any restructuring actions and cost reduction initiatives, our business, financial condition or results of operations could be adversely affected, and additional restructuring initiatives may be necessary. In addition, we cannot be sure that the cost reduction initiatives will be as successful in reducing our overall expenses as expected or that additional costs will not offset any such reductions. If our operating costs are higher than we expect or if we do not maintain adequate control of our costs and expenses, our operating results will suffer.

In addition, our cost-cutting measures could negatively impact our business, financial condition or results of operations including but not limited to, delaying the introduction of new games, features or events, interrupting live services, impairing our control environment, delaying introduction of new technology, impacting our ability to react nimbly to game or technology issues, or impacting employee retention and morale.

Our business and growth may suffer if we fail to attract, retain and motivate key personnel.

Our ability to compete and grow depends in large part on the efforts and talents of our employees and executives. Our success depends in a large part upon the continued service of our senior management team. We have seen significant changes in our management team in recent years, including the appointment of Frank Gibeau as our Chief Executive Officer, the appointment of Mark Pincus as our non-Executive Chairman and the appointments of our Chief Financial Officer, Chief Operating Officer, President of Publishing, Chief People Officer and Chief Legal Officer. Mr. Pincus and Mr. Gibeau are both critical to our vision, strategic direction, culture, products and technology, and the continued retention of our entire senior management team is important to the success of our operating plan. We do not have employment agreements, other than offer letters, with our senior management team, and we do not maintain key-man insurance for members of our senior management team. The loss of any member of our senior management team could cause disruption and harm our business, financial condition, results of operations or reputation.

In addition, our ability to execute our strategy depends on our continued ability to identify, hire, develop, motivate and retain highly skilled employees, particularly in the competitive fields of game design, product management and engineering. These employees are in high demand, and we devote significant resources to identifying, recruiting, hiring, training, successfully integrating and retaining them. We have continued to experience significant turnover in our headcount, which has placed and will continue to place significant demands on our management and our operational, financial and technological infrastructure. As of March 31, 2019 approximately 33% of our employees had been with us for less than one year and approximately 49% for less than two years.

We believe that two critical components of our success and our ability to retain our best people are our culture and our competitive compensation practices. As we operate as a public company, we may find it difficult to maintain our entrepreneurial, execution-focused culture. In addition, recent volatility in our operating results and the trading price of our Class A common stock may cause our employee base to be more vulnerable to be targeted for recruitment by competitors. Competition for highly skilled employees is intense, particularly in the San Francisco Bay Area, where our headquarters is located. If we are unable to identify, hire and retain our senior management team and our key employees, our business, financial condition or results of operations could be harmed. Moreover, if our team fails to work together effectively to execute our plans and strategies on a timely basis, our business, financial condition or results of operations could be harmed.

We have historically hired a number of key personnel through acquisitions, and as competition with other game companies for attractive target companies with a skilled employee base persists and increases, we may incur significant expenses and difficulty in continuing this practice. In addition, volatility in our operating results and the trading price of our Class A common stock may negatively impact our perceived reputation and make it more difficult and more expensive to successfully retain employees through acquisitions. The loss of talented employees with experience in the assets we acquire could result in significant disruptions to our business and the integration of acquired assets and businesses. If we do not succeed in recruiting, retaining, and motivating these key employees, we may not achieve the anticipated results of acquisitions.

Our core values of focusing on our players and acting for the long-term may conflict with the short-term expectations of analysts.

We believe surprising and delighting our players is essential to our success and serves the best, long-term interests of Zynga and our stockholders. Therefore, we have made in the past and we may make in the future, significant investments or changes in strategy that we think will benefit us in the long-term, even if our decision has the potential to negatively impact our operating results in the short term. In addition, our decisions may not result in the long-term benefits that we expect, in which case the success of our games, business, financial condition or results of operations could be harmed.

If the use of mobile devices as game platforms and the proliferation of mobile devices generally do not increase, our business could be adversely affected.

The number of people using mobile Internet-enabled devices has increased dramatically over time and we expect that this trend will continue. However, the mobile market, particularly the market for mobile games, may not grow in the way we anticipate. Our future success is substantially dependent upon the continued growth of the market for mobile games. In addition, we do not currently offer our games on all mobile devices. If the mobile devices on which our games are available decline in popularity or become obsolete faster than anticipated, we could experience a decline in bookings and revenue and may not achieve the anticipated return on our development efforts. Any such declines in the growth of the mobile market or in the use of mobile devices for games could harm our business, financial condition or results of operations.

Our ability to acquire and maintain licenses to intellectual property may affect our revenue and profitability. Competition for these licenses may make them more expensive and increase our costs.

While most of the intellectual property we use in our games is created by us, we also acquire rights to third-party intellectual property. For example, we use licensed intellectual property as creative assets in games such as *Hit It Rich! Slots*, *Wizard of Oz Slots* and *Wonka's World of Candy*, and we are developing new games using licensed intellectual property for Harry Potter™, Star Wars™ and Game of Thrones™.

Proprietary licenses typically limit our use of intellectual property to specific uses and for specific time periods, and include other contractual obligations with which we must comply. Competition for these licenses is intense, and often results in increased advances, minimum payment guarantees and royalties that we must pay to the licensor. If we are unable to obtain and remain in compliance with the terms of these licenses or obtain additional licenses on reasonable economic terms, our revenue and profitability may be adversely impacted. In addition, use of these intellectual properties generally requires that we pay a royalty to the licensor, which decreases our profitability. If the mix of player purchases shifts towards games in which we use licensed intellectual properties increases, our overall margins may be reduced.

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

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

We regard the protection of our trade secrets, copyrights, trademarks, service marks, trade dress, domain names, patents, and other product rights as critical to our success. We strive to protect our intellectual property rights by relying on federal, state and common law rights, as well as contractual restrictions and business practices. We enter into confidentiality and invention assignment agreements with our employees and contractors and confidentiality agreements with parties with whom we conduct business in order to limit access to, and disclosure and use of, our proprietary information. However, these contractual arrangements and business practices may not prevent the misappropriation of our proprietary information or deter independent development of similar technologies by others.

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

Litigation may be necessary to enforce our intellectual property rights, protect our trade secrets or determine the validity and scope of proprietary rights claimed by others. For example, we have brought actions to protect our “Zynga Poker,” “Ville,” and “With Friends” franchises against third-party users of those intellectual property assets and brands. Any litigation of this nature, regardless of outcome or merit, could result in substantial costs, adverse publicity, and diversion of management and technical resources, any of which could adversely affect our business, financial condition or results of operations. If we fail to maintain, protect and enhance our intellectual property rights, our business, financial condition or results of operations may be harmed.

Our web-based games rely on Adobe Flash, and our business and operating results could be harmed if web browsers cease to support Adobe Flash and we cannot find substitute software for our web-based games.

Our web-based games currently rely on Adobe Flash, a multimedia and software platform used to show items such as videos, graphics, games and animations on websites. In July 2017, Adobe announced that it will stop updating and distributing the Adobe Flash technology at the end of 2020. Many providers of web browsers have also communicated roadmaps for phasing out and removing Adobe Flash from their respective web-browsers by 2020. We are continuing to evaluate solutions to provide uninterrupted access to our web games. If we are unable to implement these solutions in time, or measures that we take disrupt our game experience, these games may become unavailable or their audiences may further decline, which would harm our business, financial condition and results of operations.

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

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

In addition, we use open source software in our game development and expect to continue to use open source software in the future. From time to time, we may face claims from companies that incorporate open source software into their products, claiming ownership of, or demanding release of, the source code, the open source software and/or derivative works that were developed using such software, or otherwise seeking to enforce the terms of the applicable open source license. These claims could also result in litigation, require us to purchase a costly license or require us to devote additional research and development resources to change our games, any of which would have a negative effect on our business, financial condition or results of operations.

We are involved in legal proceedings that may result in adverse outcomes.

We are involved in claims, suits, government investigations, and proceedings arising in the ordinary course of our business, including actions with respect to intellectual property claims, privacy, data protection or law enforcement matters, tax matters, labor and employment claims, commercial and acquisition-related claims, as well as stockholder derivative actions, class action lawsuits, and other matters. Such claims, suits, government investigations, and proceedings are inherently uncertain and their results cannot be predicted with certainty. Regardless of their outcomes, such legal proceedings can have an adverse impact on us because of legal costs, diversion of management and other personnel, and other factors. In addition, it is possible that a resolution of one or more such proceedings could result in liability, penalties, or sanctions, as well as judgments, consent decrees, or orders preventing us from offering certain features, functionalities, products, or services, or requiring a change in our business practices, products or technologies, which could in the future materially and adversely affect our business, financial condition or results of operations. See the section titled “Legal Matters” included in Note 15 – “Commitments and Contingencies” in the notes to the consolidated financial statements included herein.

Our business is subject to a variety of U.S. and foreign laws, many of which are unsettled and still developing and which could subject us to claims or otherwise harm our business.

We are subject to a variety of laws in the U.S. and abroad that affect our business, including state and federal laws regarding consumer protection, electronic marketing, protection of minors, data protection, competition, taxation, intellectual property, export and national security, that are continuously evolving and developing. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly laws outside the U.S. There is a risk that these laws may be interpreted in a manner that is not consistent with our current practices, and could have an adverse effect on our business. It is also likely that as our business grows and evolves and our games are played in a greater number of countries, we will become subject to laws and regulations in additional jurisdictions or other jurisdictions may claim that we are required to comply with their laws and regulations.

We are potentially subject to a number of foreign and domestic laws and regulations that affect the offering of certain types of content, such as that which depicts violence, many of which are ambiguous, still evolving and could be interpreted in ways that could harm our business or expose us to liability. In addition, there are ongoing academic, political and regulatory discussions in the U.S., Europe, Australia and other jurisdictions regarding whether social casino applications should be subject to a higher level or different type of regulation than other social game applications to protect consumers, in particular minors and persons susceptible to addiction to social casino games, and, if so, what this regulation should include. For example, a court has recently determined that a class-action plaintiff was able to state a claim that an online social casino game operated by Big Fish Games, Inc. violated a specific anti-gambling law in Washington State. We disagree with this ruling and are continuing to monitor this case. If new social casino regulations are imposed, or other regulations are interpreted to apply to our social casino games, certain of (or all of) our casino-themed games may become subject to the rules and regulations and expose us to civil and criminal penalties if we do not comply. Additionally, “loot box” game mechanics have been the subject of increased public discussion – for example, Belgium and the Netherlands have recommended enforcement actions against certain companies and the U.S. Federal Trade Commission (FTC) has recently announced that it will be holding a public workshop on loot boxes later this year. In some of our games, such as *Empires & Puzzles*, *CSR2* and *Dawn of Titans*, certain mechanics may be deemed as “loot boxes”. New regulation by the FTC, U.S. states or other international jurisdictions, which may vary significantly across jurisdictions and which we may be required to comply with, could require that these game mechanics be modified or removed from games, increase the costs of operating our games, impact player engagement and monetization or otherwise harm our business performance. It is difficult to predict how existing or new laws may be applied to these or similar game mechanics. If we are not able to comply with these laws or regulations or if we become liable under these 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 modify our games, which would harm our business, financial condition and results of operations. In addition, the increased attention focused upon liability issues as a result of lawsuits and legislative proposals could harm our reputation or otherwise impact the growth of our business. Any costs incurred as a result of this potential liability could harm our business, financial condition or results of operations.

It is possible that a number of laws and regulations may be adopted or construed to apply to us in the U.S. and elsewhere that could restrict the online and mobile industries, including player privacy, advertising, taxation, content suitability, copyright, distribution and antitrust. Furthermore, the growth and development of electronic commerce and virtual items may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies such as ours conducting business through the Internet and mobile devices. We anticipate that scrutiny and regulation of our industry will increase and we will be required to devote legal and other resources to addressing such regulation. For example, existing laws or new laws regarding the marketing of in-app purchases, labeling of free-to-play games, regulation of currency and banking institutions unclaimed property and money transmission may be interpreted to cover our games and the virtual currency, goods or payments that we receive. If that were to occur we may be required to seek licenses, authorizations or approvals from relevant regulators, the granting of which may be dependent on us meeting certain capital and other requirements and we may be subject to additional regulation and oversight, all of which could significantly increase our operating costs. Changes in current laws or regulations or the imposition of new laws and regulations in the U.S. or elsewhere regarding these activities may lessen the growth of social game services and impair our business, financial condition or results of operations.

Our international operations are subject to increased challenges and risks.

Continuing to expand our business to attract players in countries other than the U.S. is a critical element of our business strategy. An important part of targeting international markets is developing offerings that are localized and customized for the players in those markets. We expect to continue to expand our international operations in the future by opening new international studio locations and expanding our offerings in new languages. Our ability to expand our business and to attract talented employees and players in an increasing number of international markets will require considerable management attention and resources and is subject to the particular challenges of supporting a rapidly growing business in an environment of multiple languages, cultures, customs, legal systems, alternative dispute systems, regulatory systems and commercial infrastructures. We have experienced difficulties in the past and have not been successful in all the countries we have entered. Expanding our international focus may subject us to risks that we have not faced before or increase risks that we currently face, including risks associated with:

- inability to offer certain games in certain foreign countries;
- recruiting and retaining talented and capable management and employees in foreign countries;
- challenges caused by distance, language and cultural differences;
- developing and customizing games and other offerings that appeal to the tastes and preferences of players in international markets;
- competition from local game makers with intellectual property rights and significant market share in those markets and with a better understanding of player preferences;
- utilizing, protecting, defending and enforcing our intellectual property rights;
- negotiating agreements with local distribution platforms that are sufficiently economically beneficial to us and protective of our rights;
- the inability to extend proprietary rights in our brand, content or technology into new jurisdictions;
- implementing alternative payment methods for virtual items in a manner that complies with local laws and practices and protects us from fraud;
- compliance with applicable foreign laws and regulations, including privacy laws and laws relating to content and consumer protection (for example, the United Kingdom's Office of Fair Trading's 2014 principles relating to in-app purchases in free-to-play games that are directed toward children 16 and under);
- compliance with anti-bribery laws, including the Foreign Corrupt Practices Act;
- credit risk and higher levels of payment fraud;
- currency exchange rate fluctuations;
- protectionist laws and business practices that favor local businesses in some countries;
- double taxation of our international earnings and potentially adverse tax consequences due to changes in the tax laws of the U.S. or the foreign jurisdictions in which we operate;
- political, economic and social instability;
- higher costs associated with doing business internationally;
- export or import regulations; and
- trade and tariff restrictions.

If we are unable to manage the complexity of our global operations successfully, our business, financial condition and operating results could be adversely affected. Additionally, our ability to successfully gain market acceptance in any particular market is uncertain, and the distraction of our senior management team could harm our business, financial condition or results of operations.

The vote by the United Kingdom to exit from the European Union could harm our business, financial condition or results of operations.

On March 29, 2017, the United Kingdom triggered Article 50 of the Treaty on European Union by notifying the European Council of its intention to withdraw from the European Union (commonly referred to as “Brexit”). Negotiations have commenced to determine the future terms of the United Kingdom’s relationship with the European Union, including the terms of trade between the U.K. and the European Union. The effects of Brexit will depend on any agreements the United Kingdom makes to retain access to European Union markets either during a transitional period or more permanently. Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which European Union laws to replace or replicate.

The announcement of Brexit caused (and the actual exit of the United Kingdom from the European Union is expected to cause future) significant volatility in global stock markets, which could cause our stock price to be subject to wide fluctuations, and significant fluctuations in foreign currency exchange rates, which will affect our financial results as we report in U.S. dollars and may affect our ability to attract and retain employees in the United Kingdom. The announcement of Brexit also created (and the actual exit of the United Kingdom from the European Union may create future) global economic uncertainty, which may cause our players to reduce the amount of money they spend on our games. The actual exit of the United Kingdom from the European Union could cause disruptions to and create uncertainty surrounding our business, including affecting our NaturalMotion operations and relationships with existing and future players, suppliers and employees. Any of these effects of Brexit, and others we cannot anticipate, could harm our business, financial condition or results of operations.

Companies and governmental agencies may restrict access to Facebook, our website, mobile applications or the Internet generally, which could lead to the loss or slower growth of our player base.

Our players generally need to access the Internet and in particular platforms such as Facebook, Apple, Google and our website to play our games. Companies and governmental agencies could block access to Facebook, our website, mobile applications or the Internet generally for a number of reasons such as security or confidentiality concerns or regulatory reasons, or they may adopt policies that prohibit employees from accessing Facebook, Apple, Google and our website or other social platforms. If companies or governmental entities block or limit such or otherwise adopt policies restricting players from playing our games, our business could be negatively impacted and could lead to the loss or slower growth of our player base.

Changes in tax laws or tax rulings could materially affect our effective tax rates, financial position and results of operations.

The tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax laws or tax rulings, or changes in interpretations of existing laws, could cause us to be subject to additional income-based taxes and non-income taxes (such as payroll, sales, use, value-added, net worth, property, and goods and services taxes), which in turn could materially affect our financial position and results of operations. In December 2017, the U.S. federal government enacted the Tax Cuts and Jobs Act (“2017 Tax Act”). The 2017 Tax Act significantly changed the existing U.S. corporate income tax laws by, among other things, lowering the corporate tax rate, implementing a partially territorial tax system, and imposing a one-time deemed repatriation toll tax on cumulative undistributed foreign earnings. In addition, many countries in the European Union, as well as a number of other countries and organizations such as the Organization for Economic Cooperation and Development, have recently proposed or recommended changes to existing tax laws or have enacted new laws that could impact our tax obligations. Any significant changes to our future effective tax rate may result in a material adverse effect on our business, financial condition, results of operations, or cash flows. For more information, see Note 9 – “Income Taxes” in the notes to the consolidated financial statements included herein.

We may have exposure to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate operating structure and intercompany arrangements, including the manner in which we develop, value, manage, and use our intellectual property and the valuation of our intercompany transactions. The tax laws applicable to our business, including the laws of the U.S. and other jurisdictions, are subject to interpretation and certain jurisdictions are aggressively interpreting their laws in new ways in an effort to raise additional tax revenue. Our existing corporate structure and intercompany arrangements have been implemented in a manner we believe is in compliance with current prevailing tax laws. However, the taxing authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, which could impact our worldwide effective tax rate and harm our financial position and results of operations. In addition, changes to our corporate structure and intercompany agreements, including through acquisitions, could impact our worldwide effective tax rate and harm our financial position and results of operation. As a result of recent changes in tax laws, we are exploring certain changes to our international tax structure, although there can be no guarantee that any modified structure will achieve our intended goals.

We may require additional capital to meet our financial obligations and support 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 our business growth and may require additional funds to respond to business challenges, including the need to develop new games and features or enhance our existing games, improve our operating infrastructure or acquire complementary businesses, personnel and technologies. Accordingly, 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 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 that we secure in the future could involve 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. In December 2018, we entered into a credit agreement for a three-year revolving credit facility, and we must adhere to financial covenants therein. 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, financial condition or results of operations may be harmed.

We own our corporate headquarters located in San Francisco, California. The occurrence of an earthquake or other natural disaster at or near any of our facilities could cause damage to our facilities and equipment, which could require us to curtail or cease operations.

Our principal offices are located in the San Francisco Bay Area, an area known for earthquakes, and are thus vulnerable to damage. We own our corporate headquarters and lease certain office space to commercial tenants. All of our facilities are also vulnerable to damage from natural or manmade disasters, including power loss, fire, explosions, floods, communications failures, terrorist attacks and similar events. If any disaster were to occur, our ability to operate our business at our facilities could be impaired and we could incur significant losses, recovery from which may require substantial time and expense.

Risks Related to Our Class A Common Stock

Our share price has been and will likely continue to be volatile.

The trading price of our Class A common stock has been, and is likely to continue to be, highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. Between March 31, 2018 and March 31, 2019, the trading price of our Class A common stock ranged from a low of \$3.32 per share to a high of \$5.47 per share. In addition to the factors discussed in these “Risk Factors” and elsewhere in this filing, factors that may cause volatility in our share price include:

- changes in projected operational and financial results;
- issuance of new or updated research or reports by securities analysts;
- market rumors or press reports;
- announcements related to our share repurchase program;
- our announcement of significant transactions;
- actions instituted by activist shareholders or others;
- the use by investors or analysts of third-party data (such as AppData, App Annie, comScore, and Sensor Tower) regarding our business and operating metrics which may not reflect our actual performance or financial results;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- the activities, public announcements and financial performance of our commercial partners, such as Apple, Amazon, Facebook and Google;
- fluctuations in the trading volume of our shares, or the size of our public float relative to the total number of shares of our Class A common stock that are issued and outstanding;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares; and
- general economic and market conditions.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. 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, interest rate changes or international currency fluctuations, may negatively impact the market price of our Class A common stock. In the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We have been the target of this type of litigation as described in the section titled “Legal Matters” included in Note 15 —“Commitments and Contingencies” in the notes to the consolidated financial statements included herein. Securities litigation against us could result in substantial costs and divert our management’s attention from other business concerns, which could harm our business.

In addition, in November 2016, the 2016 Share Repurchase Program was authorized for up to \$200.0 million of our outstanding Class A common stock. In the second quarter of 2018, we completed all purchases under the 2016 Share Repurchase Program. In April 2018, our Board of Directors authorized the 2018 Share Repurchase Program allowing us to repurchase up to an additional \$200.0 million of our outstanding shares of Class A common stock. The timing and amount of any stock repurchases will be determined based on market conditions, share price and other factors. The 2018 Share Repurchase Program does not require us to repurchase any specific number of shares of our Class A common stock, and may be modified, suspended or terminated at any time without notice. The 2018 Share Repurchase Program will be funded from existing cash on hand or other sources of financing as the Company may determine to be appropriate. Share repurchases under these authorizations may be made through a variety of methods, which may include open market purchases, privately negotiated transactions, block trades, accelerated share repurchase transactions, purchases through 10b5-1 plans or by any combination of such methods. Repurchases of our Class A common stock in the open market could result in increased volatility in our stock price. There is no guarantee that we will make any share repurchases under the 2018 Share Repurchase Program or otherwise in the future.

Certain provisions in our charter documents and under Delaware law could limit attempts by our stockholders to replace or remove our Board of Directors or current management and limit the market price of our Class A common stock.

Provisions in our certificate of incorporation and bylaws may have the effect of delaying or preventing changes in our Board of Directors or management. Our certificate of incorporation and bylaws include provisions that:

- establish an advance notice procedure for stockholder proposals to be brought before an annual meeting, including proposed nominations of persons for election to our Board of Directors;
- prohibit cumulative voting in the election of directors;
- authorize “blank check” preferred stock that our Board of Directors could issue; and
- limit the ability of stockholders to call a special stockholder meeting and to act by written consent.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder.

Our Class A common stock price may be volatile due to third-party data regarding our games.

Third parties, such as AppData, App Annie, comScore, and Sensor Tower publish daily data about us and other social game companies with respect to DAUs and MAUs, monthly revenue, top game charts, time spent per user and other information concerning social game usage. These metrics can be volatile, particularly for specific games, and in many cases do not accurately reflect the actual levels of usage of our games across all platforms and may not correlate to our bookings or revenue from the sale of virtual items. There is a possibility that third parties could change their methodologies for calculating these metrics in the future. To the extent that securities analysts or investors base their views of our business or prospects on such third-party data, the price of our Class A common stock may be volatile and may not reflect the performance of our business.

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

The trading market for our Class A common stock, to some extent, depends on the research and reports that securities or industry analysts publish about our business. We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our shares or lower their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

If we are unable to implement and maintain effective internal control over financial reporting in the future, the accuracy and timeliness of our financial reporting may be adversely affected.

If we are unable to maintain adequate internal controls for financial reporting in the future, or if our auditors are unable to express an opinion as to the effectiveness of our internal controls as required pursuant to the Sarbanes-Oxley Act of 2002, investor confidence in the accuracy of our financial reports may be impacted or the market price of our Class A common stock could be negatively impacted.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain qualified Board members.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform Act and Consumer Protection Act of 2010, the listing requirements of the NASDAQ Global Select Market and other applicable securities rules and regulations. Compliance with these rules and regulations has increased and will continue to increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and operating results.

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

We have no plans to pay dividends for the foreseeable future.

We have never declared or paid any cash dividends on our common stock and do not have any plans to pay cash dividends in the foreseeable future. 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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND ISSUER PURCHASES OF EQUITY SECURITIES

Unregistered Sales of Equity Securities

On January 2, 2019, we completed the acquisition of 80% of all issued and outstanding shares and other equity securities (including all rights to acquire shares) of Small Giant pursuant to a Share Sale and Purchase Agreement dated December 20, 2018. At closing, we paid approximately \$363.5 million in cash and issued 63,794,746 shares of our Class A common stock to the securityholders of Small Giant in a private placement pursuant to certain exemptions from the registration requirements of the Securities Act of 1933, as amended.

Issuer Purchases of Equity Securities

Stock repurchases during the first quarter of 2019, which were all made pursuant to the 2018 Share Repurchase Program, were as follows:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs ⁽¹⁾	Maximum Dollar Value That May Yet Be Purchased Under the Program ⁽¹⁾
January 1 - January 31, 2019	—	\$ —	—	\$ 173,847,972
February 1 - February 28, 2019	—	\$ —	—	\$ 173,847,972
March 1 - March 31, 2019	—	\$ —	—	\$ 173,847,972
Total	—	\$ —	—	—

(1) In April 2018, our Board of Directors authorized the 2018 Share Repurchase Program, which authorizes us to repurchase up to \$200 million of our outstanding Class A common stock.

ITEM 6. EXHIBITS

Exhibit No.	Description of Exhibit	Incorporated by Reference				Filed or Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
2.1*	Share Sale and Purchase Agreement relating to the sale and purchase of all issued and outstanding shares and other equity securities of Small Giant Games Oy between those persons listed in Schedule 1 as Sellers and Zynga Inc. as Purchaser	8-K	001-35375	2.1	12/20/2018	
31.1	Certification of the Chief Executive Officer of Zynga Inc. pursuant to rule 13a-14 under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
31.2	Certification of the Chief Financial Officer of Zynga Inc. pursuant to rule 13a-14 under the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002					X
32.1•	Certification of the Chief Executive Officer and Chief Financial Officer of Zynga Inc. pursuant to 18 U.S.C. Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002					X
101.INS	XBRL Instance Document					
101.SCH	XBRL Taxonomy Extension Schema Document					
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document					
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB	XBRL Taxonomy Extension Labels Linkbase Document					
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document					

+ Indicates management contract or compensatory plan.

* Confidential treatment has been granted for certain information contained in this exhibit. Such information has been omitted and was filed separately with the Securities and Exchange Commission.

• The certification attached as Exhibit 32.1 accompanying this Quarterly Report on Form 10-Q pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or any other filing under the Exchange Act, except as expressly set forth by specific reference in such a filing.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report on to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Francisco, State of California, on May 7, 2019.

ZYNGA INC.

By: /s/ Frank Gibeau

Frank Gibeau
Chief Executive Officer
(On behalf of Registrant)

By: /s/ Gerard Griffin

Gerard Griffin
Chief Financial Officer
(On behalf of Registrant)

By: /s/ Jeffrey Buckley

Jeffrey Buckley
Chief Accounting Officer
(On behalf of Registrant)

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. § 1350), Frank Gibeau, Chief Executive Officer of Zynga Inc. (the “Company”), and Gerard Griffin, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and
2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

In Witness Whereof, the undersigned have set their hands hereto as of the 7th day of May, 2019.

/s/ Frank Gibeau

Frank Gibeau
Chief Executive Officer

/s/ Gerard Griffin

Gerard Griffin
Chief Financial Officer

“This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Zynga Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.”