

**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 September 30, 2021

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)

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

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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

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

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

As of October 15, 2021, there were 1,120,181,490 shares of the Registrant's Class A common stock outstanding.

Zynga Inc.
Form 10-Q Quarterly Report

TABLE OF CONTENTS

	<u>Page</u>
<u>Cautionary Note Regarding Forward-Looking Statements</u>	1
<u>PART I. FINANCIAL INFORMATION</u>	
Item 1. <u>Financial Statements (Unaudited)</u>	2
<u>Consolidated Balance Sheets as of September 30, 2021 and December 31, 2020</u>	2
<u>Consolidated Statements of Operations for the Three and Nine Months Ended September 30, 2021 and 2020</u>	3
<u>Consolidated Statements of Comprehensive Income (Loss) for the Three and Nine Months Ended September 30, 2021 and 2020</u>	4
<u>Consolidated Statements of Stockholders' Equity for the Three and Nine Months Ended September 30, 2021 and 2020</u>	5
<u>Consolidated Statements of Cash Flows for the Nine Months Ended September 30, 2021 and 2020</u>	7
<u>Notes to Consolidated Financial Statements</u>	8
Item 2. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	29
Item 3. <u>Quantitative and Qualitative Disclosure About Market Risk</u>	46
Item 4. <u>Controls and Procedures</u>	46
<u>PART II. OTHER INFORMATION</u>	
Item 1. <u>Legal Proceedings</u>	47
Item 1A. <u>Risk Factors</u>	47
Item 2. <u>Unregistered Sales of Equity Securities and Issuer Purchases of Equity Purchases</u>	70
Item 6. <u>Exhibits</u>	71
<u>Signatures</u>	72

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

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, the impact of the ongoing coronavirus (COVID-19) pandemic and our response to it, our ability to integrate and achieve the intended benefits of our recent acquisitions, 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 millions, except par value)
(Unaudited)

	September 30, 2021	December 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 1,087.2	\$ 1,364.4
Short-term investments	252.6	208.4
Accounts receivable, net of allowance of \$0.9 at September 30, 2021 and \$0.5 at December 31, 2020	210.0	217.5
Restricted cash	136.0	—
Prepaid expenses	58.2	40.0
Other current assets	32.5	29.5
Total current assets	<u>1,776.5</u>	<u>1,859.8</u>
Long-term investments	—	2.0
Goodwill	3,296.6	3,160.8
Intangible assets, net	806.3	838.1
Property and equipment, net	26.3	39.3
Right-of-use assets	90.3	131.9
Restricted cash	25.2	136.0
Prepaid expenses	23.4	21.6
Other non-current assets	23.1	17.0
Total assets	<u>\$ 6,067.7</u>	<u>\$ 6,206.5</u>
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 50.0	\$ 57.2
Income tax payable	63.4	39.6
Deferred revenue	733.6	747.7
Operating lease liabilities	17.6	18.5
Other current liabilities	552.2	462.4
Total current liabilities	<u>1,416.8</u>	<u>1,325.4</u>
Convertible senior notes, net	1,330.2	1,289.9
Deferred revenue	0.1	0.3
Deferred tax liabilities, net	97.9	126.3
Non-current operating lease liabilities	137.4	122.0
Other non-current liabilities	78.3	401.1
Total liabilities	<u>3,060.7</u>	<u>3,265.0</u>
Stockholders' equity:		
Common stock, \$0.00000625 par value and additional paid in capital - authorized shares: 2,020.5; shares outstanding: 1,100.2 shares as of September 30, 2021 and 1,081.6 as of December 31, 2020	5,418.8	5,276.5
Accumulated other comprehensive income (loss)	(75.4)	(50.7)
Accumulated deficit	(2,336.4)	(2,284.3)
Total stockholders' equity	<u>3,007.0</u>	<u>2,941.5</u>
Total liabilities and stockholders' equity	<u>\$ 6,067.7</u>	<u>\$ 6,206.5</u>

See accompanying notes to consolidated financial statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Revenue:				
Online game	\$ 571.1	\$ 436.0	\$ 1,715.1	\$ 1,168.6
Advertising and other	133.6	67.3	389.9	190.2
Total revenue	704.7	503.3	2,105.0	1,358.8
Costs and expenses:				
Cost of revenue	240.8	235.9	754.8	561.4
Research and development	143.5	165.9	394.0	591.7
Sales and marketing	216.7	187.0	709.6	444.8
General and administrative	49.2	36.1	122.8	103.5
Impairment related to real estate assets	66.8	—	66.8	—
Total costs and expenses	717.0	624.9	2,048.0	1,701.4
Income (loss) from operations	(12.3)	(121.6)	57.0	(342.6)
Interest income	1.6	1.0	5.0	10.2
Interest expense	(14.8)	(7.3)	(44.2)	(21.2)
Other income (expense), net	(0.6)	(3.1)	(0.8)	(4.9)
Income (loss) before income taxes	(26.1)	(131.0)	17.0	(358.5)
Provision for (benefit from) income taxes	15.6	(8.8)	53.9	17.9
Net income (loss)	\$ (41.7)	\$ (122.2)	\$ (36.9)	\$ (376.4)
Net income (loss) per share attributable to common stockholders:				
Basic	<u>\$ (0.04)</u>	<u>\$ (0.11)</u>	<u>\$ (0.03)</u>	<u>\$ (0.38)</u>
Diluted	<u>\$ (0.04)</u>	<u>\$ (0.11)</u>	<u>\$ (0.03)</u>	<u>\$ (0.38)</u>
Weighted-average common shares used to compute net income (loss) per share attributable to common stockholders:				
Basic	1,097.1	1,076.7	1,090.4	995.6
Diluted	1,097.1	1,076.7	1,090.4	995.6

See accompanying notes to consolidated financial statements.

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Net income (loss)	\$ (41.7)	\$ (122.2)	\$ (36.9)	\$ (376.4)
Other comprehensive income (loss), net of tax:				
Change in foreign currency translation adjustment	(20.1)	31.7	(24.6)	19.0
Net change in unrealized gains (losses) on available-for-sale marketable debt securities	—	(0.4)	(0.1)	—
Other comprehensive income (loss), net of tax	<u>(20.1)</u>	<u>31.3</u>	<u>(24.7)</u>	<u>19.0</u>
Comprehensive income (loss)	<u>\$ (61.8)</u>	<u>\$ (90.9)</u>	<u>\$ (61.6)</u>	<u>\$ (357.4)</u>

See accompanying notes to consolidated financial statements.

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

	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, 2020	<u>1,081.6</u>	<u>\$ —</u>	<u>\$ 5,276.5</u>	<u>\$ —</u>	<u>\$ (50.7)</u>	<u>\$ (2,284.3)</u>	<u>\$ 2,941.5</u>
Exercise of stock options and ESPP	2.7	—	10.5	—	—	—	10.5
Vesting of RSUs, net of tax withholdings	4.5	—	—	(8.2)	—	—	(8.2)
Stock-based compensation expense	—	—	37.2	—	—	—	37.2
Retirements of treasury stock	—	—	—	8.2	—	(8.2)	—
Net income (loss)	—	—	—	—	—	(23.0)	(23.0)
Other comprehensive income (loss)	—	—	—	—	(15.6)	—	(15.6)
Balances at March 31, 2021	<u>1,088.8</u>	<u>\$ —</u>	<u>\$ 5,324.2</u>	<u>\$ —</u>	<u>\$ (66.3)</u>	<u>\$ (2,315.5)</u>	<u>\$ 2,942.4</u>
Exercise of stock options and ESPP	0.1	—	0.2	—	—	—	0.2
Vesting of RSUs, net of tax withholdings	3.1	—	—	(4.0)	—	—	(4.0)
Stock-based compensation expense	—	—	43.2	—	—	—	43.2
Retirements of treasury stock	—	—	—	4.0	—	(4.0)	—
Net income (loss)	—	—	—	—	—	27.8	27.8
Other comprehensive income (loss)	—	—	—	—	11.0	—	11.0
Balances at June 30, 2021	<u>1,092.0</u>	<u>\$ —</u>	<u>\$ 5,367.6</u>	<u>\$ —</u>	<u>\$ (55.3)</u>	<u>\$ (2,291.7)</u>	<u>\$ 3,020.6</u>
Exercise of stock options and ESPP	0.6	—	4.4	—	—	—	4.4
Vesting of RSUs, net of tax withholdings	7.6	—	—	(3.0)	—	—	(3.0)
Acquisition-related stock option issuance	—	—	2.2	—	—	—	2.2
Stock-based compensation expense	—	—	44.6	—	—	—	44.6
Retirements of treasury stock	—	—	—	3.0	—	(3.0)	—
Net income (loss)	—	—	—	—	—	(41.7)	(41.7)
Other comprehensive income (loss)	—	—	—	—	(20.1)	—	(20.1)
Balances at September 30, 2021	<u>1,100.2</u>	<u>\$ —</u>	<u>\$ 5,418.8</u>	<u>\$ —</u>	<u>\$ (75.4)</u>	<u>\$ (2,336.4)</u>	<u>\$ 3,007.0</u>

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

	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, 2019	950.0	\$ —	\$ 3,898.7	\$ —	\$ (125.9)	\$ (1,797.4)	\$ 1,975.4
Exercise of stock options and ESPP	2.5	—	8.8	—	—	—	8.8
Vesting of RSUs, net of tax withholdings	3.3	—	—	(14.8)	—	—	(14.8)
Stock-based compensation expense	—	—	20.5	—	—	—	20.5
Retirements of treasury stock	—	—	—	14.8	—	(14.8)	—
Adoption of ASU 2016-13	—	—	—	—	—	(0.4)	(0.4)
Net income (loss)	—	—	—	—	—	(103.9)	(103.9)
Other comprehensive income (loss)	—	—	—	—	(30.0)	—	(30.0)
Balances at March 31, 2020	955.8	\$ —	\$ 3,928.0	\$ —	\$ (155.9)	\$ (1,916.5)	\$ 1,855.6
Exercise of stock options and ESPP	0.6	—	1.9	—	—	—	1.9
Vesting of RSUs, net of tax withholdings	2.4	—	—	(14.3)	—	—	(14.3)
Stock-based compensation expense	—	—	25.6	—	—	—	25.6
Retirements of treasury stock	—	—	—	14.3	—	(14.3)	—
Net income (loss)	—	—	—	—	—	(150.3)	(150.3)
Other comprehensive income (loss)	—	—	—	—	17.7	—	17.7
Balances at June 30, 2020	958.8	\$ —	\$ 3,955.5	\$ —	\$ (138.2)	\$ (2,081.1)	\$ 1,736.2
Exercise of stock options and ESPP	1.1	—	5.4	—	—	—	5.4
Vesting of RSUs, net of tax withholdings	2.5	—	—	(13.8)	—	—	(13.8)
Acquisition-related common stock issuance	116.6	—	1,137.7	—	—	—	1,137.7
Stock-based compensation expense	—	—	38.8	—	—	—	38.8
Retirements of treasury stock	—	—	—	13.8	—	(13.8)	—
Net income (loss)	—	—	—	—	—	(122.2)	(122.2)
Other comprehensive income (loss)	—	—	—	—	31.3	—	31.3
Balances at September 30, 2020	1,079.0	\$ —	\$ 5,137.4	\$ —	\$ (106.9)	\$ (2,217.1)	\$ 2,813.4

See accompanying notes to consolidated financial statements.

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

	Nine Months Ended September 30,	
	2021	2020
Cash flows from operating activities:		
Net income (loss)	\$ (36.9)	\$ (376.4)
Adjustments to reconcile net income (loss) to net cash provided by (used in) operating activities:		
Depreciation and amortization	170.7	87.1
Stock-based compensation expense	125.0	84.9
(Gain) loss from derivatives, sale of investments and other assets and foreign currency, net	(4.9)	2.5
(Accretion) amortization on marketable debt securities, net	—	(2.2)
Noncash lease expense	12.9	11.8
Noncash interest expense	40.2	18.8
Change in deferred income taxes and other	(43.0)	(11.1)
Impairment related to real estate assets	66.8	—
Changes in operating assets and liabilities:		
Accounts receivable, net	24.3	(28.5)
Prepaid expenses and other assets	(21.9)	6.5
Accounts payable	(7.4)	(4.7)
Deferred revenue	(4.2)	210.2
Income tax payable	25.1	19.3
Operating lease and other liabilities	(250.8)	205.1
Net cash provided by (used in) operating activities	95.9	223.3
Cash flows from investing activities:		
Purchases of investments	(612.7)	(560.0)
Maturities of investments	568.8	1,024.6
Sales of investments	—	549.9
Acquisition of property and equipment	(6.8)	(16.1)
Business combinations, net of cash acquired and restricted cash held in escrow	(222.2)	(791.1)
Release of restricted cash escrow from business combinations	—	(30.0)
Asset acquisitions of intangible assets	(4.3)	—
Other investing activities, net	(5.9)	(1.4)
Net cash provided by (used in) investing activities	(283.1)	175.9
Cash flows from financing activities:		
Debt issuance costs paid	(1.2)	—
Taxes paid related to net share settlement of stockholders' equity awards	(15.2)	(42.9)
Proceeds from issuance of common stock	15.1	16.1
Acquisition-related contingent consideration payments	(56.1)	(63.6)
Net cash provided by (used in) financing activities	(57.4)	(90.4)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(7.4)	11.4
Net change in cash, cash equivalents and restricted cash	(252.0)	320.2
Cash, cash equivalents and restricted cash, beginning of period	1,500.4	453.3
Cash, cash equivalents and restricted cash, end of period	\$ 1,248.4	\$ 773.5
Noncash investing activities:		
Acquisition-related deferred purchase consideration	\$ 2.3	\$ 23.8
Acquisition-related stock option issuance	2.2	—
Acquisition-related common stock issuance	—	1,137.7

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 Apple’s iOS and Google’s Android), social networking platforms (such as Facebook and Snapchat), Personal Computers (PCs), consoles (such as Nintendo’s Switch) and other platforms. We also operate a mobile programmatic advertising and monetization platform. 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 prepared and 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 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, 2020.

Unaudited Interim Financial Information

The accompanying interim consolidated balance sheet as of September 30, 2021, the interim consolidated statements of operations, statements of comprehensive income (loss) and statements of stockholders’ equity for the three and nine months ended September 30, 2021 and 2020, statements of cash flows for the nine months ended September 30, 2021 and 2020 and the notes to the interim consolidated financial statements are unaudited. 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 and nine months ended September 30, 2021 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 measuring our operating lease liabilities, the interest rate used in calculating the present value of the initial liability component of our convertible senior notes, stock-based compensation expense and evaluation of recoverability of goodwill, intangible assets and long-lived assets and as necessary, estimates of fair value to measure impairment losses. Actual results could differ materially from those estimates.

Recent Accounting Pronouncements

Issued But Not Yet Adopted

In August 2020, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2020-06, “*Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity’s Own Equity (Subtopic 815-40)*”, which simplifies the accounting for convertible instruments by reducing the number of accounting models and requiring that a convertible instrument be accounted for as a single liability measured at amortized cost. Further, the ASU amends the earnings per share guidance by requiring the diluted earnings per share calculation for convertible instruments to follow the if-converted method, with use of the treasury stock method no longer permitted. The ASU is effective for fiscal years beginning after December 15, 2021, with early adoption permitted, but no earlier than fiscal years beginning after December 15, 2020. The ASU allows either a modified retrospective method of transition or a fully retrospective method of transition, with any adjustments recognized as an adjustment to the opening balance of retained earnings. The Company is currently assessing this standard’s impact on

its consolidated financial statements, but does anticipate a material adjustment to the carrying amount of the liability and equity components of our convertible senior notes upon adoption and the Company will adopt on January 1, 2022.

In October 2021, the FASB issued ASU 2021-08, “*Business Combinations (Topic 805) – Accounting for Contract Assets and Contract Liabilities from Contracts with Customers*”, which requires that an acquirer recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with Topic 606, as if it had originated the contracts. Prior to this ASU, an acquirer generally recognizes contract assets acquired and contract liabilities assumed that arose from contracts with customers at fair value on the acquisition date. The ASU is effective for fiscal years beginning after December 15, 2022, with early adoption permitted. The ASU is to be applied prospectively to business combinations occurring on or after the effective date of the amendment (or if adopted early as of an interim period, as of the beginning of the fiscal year that includes the interim period of early application). The Company is currently assessing this standard’s impact on its consolidated financial statements.

2. Revenue from Contracts with Customers

Disaggregation of Revenue

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Online game:				
Mobile	\$ 552.8	\$ 418.0	\$ 1,659.1	\$ 1,117.0
Other ⁽¹⁾	18.3	18.0	56.0	51.6
Online game total	\$ 571.1	\$ 436.0	\$ 1,715.1	\$ 1,168.6
Advertising and other:				
Mobile	\$ 132.3	\$ 66.1	\$ 385.9	\$ 186.8
Other ⁽¹⁾	1.3	1.2	4.0	3.4
Advertising and other total	\$ 133.6	\$ 67.3	\$ 389.9	\$ 190.2
Total revenue	\$ 704.7	\$ 503.3	\$ 2,105.0	\$ 1,358.8

(1) Includes web revenue 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 millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
United States	\$ 425.1	\$ 311.9	\$ 1,273.4	\$ 831.4
All other countries ⁽¹⁾	279.6	191.4	831.6	527.4
Total revenue	\$ 704.7	\$ 503.3	\$ 2,105.0	\$ 1,358.8

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

The estimated weighted average playing period of payers was ten and nine months for the three months ended September 30, 2021 and 2020, respectively. The estimated weighted average playing period of payers was ten months for the nine months ended September 30, 2021 and 2020.

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 45 days of invoicing. Our right to the payments collected on our behalf is 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. 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 and nine months ended September 30, 2021, we recognized \$96.4 million and \$726.7 million, respectively, of revenue that was included in the current deferred revenue balance on December 31, 2020.

The decrease in accounts receivable, net during the nine months ended September 30, 2021 was primarily driven by cash collections of current period and previously due amounts exceeding sales on account during the period, partially offset by the contribution from Chartboost, which was acquired in August 2021. The decrease in deferred revenue during the nine months ended September 30, 2021 was primarily driven by revenue recognized from the satisfaction of our performance obligations exceeding the sale of virtual items during the period.

Unsatisfied Performance Obligations

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

3. Financial Instruments

Debt Securities

The following tables summarize the amortized cost, gross unrealized gains and losses and fair value of our short-term and long-term debt securities as of September 30, 2021 and December 31, 2020 (in millions):

	September 30, 2021			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
Short-term debt securities:				
Corporate debt securities	\$ 195.4	\$ —	\$ —	\$ 195.4
Foreign certificates of deposit and time deposits	9.8	—	—	9.8
Total	<u>\$ 205.2</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 205.2</u>
	December 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Aggregate Fair Value
Short-term debt securities:				
Corporate debt securities	\$ 152.7	\$ 0.1	\$ —	\$ 152.8
Foreign certificates of deposit and time deposits	6.5	—	—	6.5
Total	<u>\$ 159.2</u>	<u>\$ 0.1</u>	<u>\$ —</u>	<u>\$ 159.3</u>
Long-term debt securities:				
Corporate debt securities	\$ 2.0	\$ —	\$ —	\$ 2.0
Total	<u>\$ 2.0</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 2.0</u>

Equity Securities

We recognized a gain of \$0.1 million and \$0.3 million during the three and nine months ended September 30, 2021, respectively, as a component of other income (expense), net in our consolidated statement of operations associated with our mutual fund equity investments. We recognized a gain of \$0.3 million and a loss of \$0.4 million during the three and nine months ended September 30, 2020, respectively, as a component of other income (expense), net in our consolidated statement of operations associated with our mutual fund equity investments.

Derivative Financial Instruments

Beginning in July 2021, the Company entered into derivative instruments to manage certain of our foreign exchange risks. We use foreign currency contracts to reduce the risk that our cash flows, earnings and investment in foreign subsidiaries will be adversely affected by foreign currency exchange rate fluctuations. The Company records all derivatives net, as either other current assets or liabilities, at fair value.

Designated Hedging Derivatives - Net Investment Hedge

Certain foreign currency forward contracts are designated as net investment hedges to hedge foreign currency risks related to the Company's investment in certain foreign subsidiaries. Changes in the fair value of the net investment hedge amounts that are included in the assessment of hedge effectiveness are recorded in Other Comprehensive Income (Loss) ("OCI") with the foreign currency translation adjustment and the excluded components (e.g. forward points) from the assessment of hedge effectiveness are recognized in other income (expense) on a straight-line basis over the life of the hedge.

Non-designated Hedging Derivatives - Other Derivatives

Other derivatives not designated as hedging instruments consist of foreign currency forward contracts that are used to offset foreign currency risks associated with the remeasurement of certain intercompany loans. Gains and losses on these contracts are recognized in other income (expense), net in our consolidated statement of operations.

The following table summarizes the notional amounts of our outstanding derivative instruments (in millions):

	<u>September 30, 2021</u>
Designated Hedging Derivatives:	
Foreign exchange contracts	
Net investment hedge	\$ 202.5
Non-Designated Hedging Derivatives:	
Foreign exchange contracts	\$ 243.7

The following table shows the gains and losses on designated hedging derivatives recognized in OCI (in millions):

	<u>Gains (Losses) Recognized in OCI</u>
	<u>Three and Nine Months Ended September 30, 2021</u>
Net Investment Hedging Derivatives:	
Foreign exchange contracts	
Amount included in the assessment of effectiveness	\$ 2.8

The following table shows the effect of derivative instruments recorded in other income (expense), net in our consolidated statements of operations (in millions):

	<u>Gains (Losses) Recognized in Other Income (Expense)</u>
	<u>Three and Nine Months Ended September 30, 2021</u>
Net Investment Hedging Derivatives:	
Foreign exchange contracts	
Amount excluded from the assessment of effectiveness	\$ 0.3
Non-Designated Hedging Derivatives:	
Foreign exchange contracts	\$ (4.2)

4. Fair Value Measurements

The composition of our financial assets and liabilities among the three levels of the fair value hierarchy are as follows (in millions):

	September 30, 2021			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	\$ 384.2	\$ —	\$ —	\$ 384.2
Foreign certificates of deposit and time deposits	—	189.4	—	189.4
Short-term investments:				
Corporate debt securities	—	195.4	—	195.4
Foreign certificates of deposit and time deposits	—	9.8	—	9.8
Mutual funds	—	47.4	—	47.4
Derivative assets:				
Designated hedging derivatives - foreign exchange contracts	—	2.8	—	2.8
Non-designated hedging derivatives - foreign exchange contracts	—	0.3	—	0.3
Total financial assets	\$ 384.2	\$ 445.1	\$ —	\$ 829.3
Liabilities:				
Contingent consideration	\$ —	\$ —	\$ 213.9	\$ 213.9
Total financial liabilities	\$ —	\$ —	\$ 213.9	\$ 213.9

	December 31, 2020			
	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents:				
Money market funds	\$ 611.1	\$ —	\$ —	\$ 611.1
Corporate debt securities	—	313.0	—	313.0
Foreign certificates of deposit and time deposits	—	85.6	—	85.6
Short-term investments:				
Corporate debt securities	—	152.8	—	152.8
Foreign certificates of deposit and time deposits	—	6.5	—	6.5
Mutual funds	—	49.1	—	49.1
Long-term investments:				
Corporate debt securities	—	2.0	—	2.0
Total financial assets	\$ 611.1	\$ 609.0	\$ —	\$ 1,220.1
Liabilities:				
Contingent consideration	\$ —	\$ —	\$ 463.1	\$ 463.1
Total financial liabilities	\$ —	\$ —	\$ 463.1	\$ 463.1

The following table presents the activity for the nine months ended September 30, 2021 related to our Level 3 liabilities (in millions):

Level 3 Liabilities:	Contingent Consideration
Balance as of December 31, 2020	\$ 463.1
Additions	—
Fair value adjustments	50.0
Payments	(239.6)
Rollic contingency resolution	(59.6)
Balance as of September 30, 2021	<u>\$ 213.9</u>

In July 2021, the Company settled the final contingent consideration obligation for \$75.0 million related to its acquisition of Gram Games in the second quarter of 2018. For the three and nine months ended September 30, 2021, we recognized \$0.1 million and \$0.9 million of expense, respectively, within research and development expenses in our consolidated statement of operations related to the Gram Games contingent consideration.

As of September 30, 2021, our contingent consideration obligations relate to the additional consideration payable in connection with our acquisitions of Small Giant in the first quarter of 2019 and Rollic in the fourth quarter of 2020.

Under the original terms of the Small Giant acquisition, contingent consideration may be payable based on the achievement of certain future profitability metrics during each annual period following the acquisition date for a total of three years, with no maximum limit as to the contingent consideration achievable. Under the original terms of the Rollic acquisition, contingent consideration may be payable based on the achievement of certain future bookings and profitability metrics 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. For these acquisitions, we estimated the acquisition date fair value of the contingent consideration obligations using a Monte Carlo simulation. The significant unobservable inputs used in estimating these acquisition date fair value measurements were each entity's projected performance, a risk-adjusted discount rate and performance volatility similar to industry peers.

With respect to the remaining Rollic contingent consideration obligation, the Company executed an amendment to the Share Purchase Agreement with the former owners of Rollic in the second quarter of 2021 to accelerate the Company's acquisition of the remaining 20% ownership in Rollic and to set the total contingent consideration payment at \$60.0 million (the "Rollic Amendment"). In July 2021, the Company acquired the remaining 20% ownership and paid \$20.0 million, with the remaining \$40.0 million to be paid in first quarter of 2022. At the date of the Rollic Amendment, the Company measured the remaining final obligation by calculating the present value of the final payments using a discount rate of 1.3%, commensurate with the remaining term. The Company accretes the obligation up to its final amount using the effective interest method.

The estimated value of the Rollic contingent consideration obligation decreased from \$53.8 million as of December 31, 2020 to \$39.8 million as of September 30, 2021. For the three and nine months ended September 30, 2021, we recognized \$0.1 million and \$6.0 million of expense, respectively, within research and development expenses in our consolidated statement of operations related to the Rollic contingent consideration.

With the respect to the remaining Small Giant contingent consideration obligation, we estimate the fair value at each subsequent reporting period using a Monte Carlo simulation. The table below outlines the significant unobservable inputs used in estimating the fair value of the last remaining Small Giant contingent consideration liability as of September 30, 2021:

	Unobservable Inputs
Annual bookings growth (decline) rate	(7.7%)
Bookings volatility	30.0%
Asset volatility	40.0%
Net cash flow margin	53.7%
Discount rate	9.5%

Changes in the projected performance of the acquired businesses could result in a higher or lower contingent consideration obligation in the future.

In April 2021, the Company executed an amendment to the Share Purchase Agreement with the former owners of Small Giant to exclude the direct profitability (which includes marketing expenses) of *Puzzle Combat*, which launched globally in April 2021, from the remaining performance period.

The estimated fair value of the Small Giant contingent consideration obligation decreased from \$409.3 million as of December 31, 2020 to \$213.9 million as of September 30, 2021. The decrease was driven by a \$239.6 million payment in the first quarter of 2021 to the former owners of Small Giant for its performance during the second contingent consideration period, partially offset by the increased probability of achievement and stronger than expected performance during the remaining performance period. For the three and nine months ended September 30, 2021, we recognized \$21.3 million and \$44.2 million of expense, respectively, within research and development expenses in our consolidated statements of operations.

5. Property and Equipment, Net

During the third quarter of 2021, the Company recognized an impairment loss related to its leasehold improvements, computer equipment and furniture and fixtures in the amounts of \$7.5 million, \$0.7 million and \$0.7 million, respectively. Following the impairment, the adjusted carrying amount of the impacted assets represent their new cost basis. Refer to Note 6 – “Leases” for further background on the impairment loss.

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

	September 30, 2021	December 31, 2020
Computer equipment	\$ 32.5	\$ 30.4
Software	35.5	35.1
Furniture and fixtures	7.6	10.6
Leasehold improvements	20.9	30.8
Total property and equipment, gross	\$ 96.5	\$ 106.9
Less: Accumulated depreciation	(70.2)	(67.6)
Total property and equipment, net	\$ 26.3	\$ 39.3

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

	September 30, 2021	December 31, 2020
United States	\$ 10.6	\$ 23.4
Turkey	8.0	7.7
India	3.6	4.3
United Kingdom	2.9	3.0
All other countries ⁽¹⁾	1.2	0.9
Total property and equipment, net	\$ 26.3	\$ 39.3

(1) No other foreign country exceeded 10% of our total property and equipment, net for any periods presented.

6. Leases

In August 2021, in consideration of the changing nature of the Company’s need for office space for its workforce, the Company’s Board of Directors approved a plan to sublease the Company’s current 185,000 square foot San Francisco, California office space (the “San Francisco Office Building”), as the Company transitions to a hybrid in-office and remote employee work model. As a result of the Board of Director’s decision and the accumulation of other factors, the Company recognized a \$66.8 million impairment loss during the third quarter of 2021. The impairment loss recorded included \$57.9 million related to the San Francisco Office Building right-of-use lease asset and \$8.9 million related to property and equipment, net associated with the San Francisco Office Building (collectively, the “San Francisco Office Asset Group”).

The fair value of the San Francisco Office Asset Group was estimated using a risk-adjusted, discounted cash flow model with Level 3 inputs. The significant assumptions used in estimating the fair value include the projected sublease income over the remaining lease term, expected downtime prior to the commencement of future subleases, expected rent concessions offered to future tenants and discount rates that reflected the level of risk associated with these future cash flows.

In the second quarter of 2021, the Company executed a lease for office space of approximately 62,000 square feet in San Mateo, California (the “San Mateo Office Building”) over an approximate 11-year lease term (the “Office Lease Agreement”), with annual lease expense of approximately \$3.0 million beginning in June 2021. The Office Lease Agreement provides the Company two separate options to extend the lease for five years each (for a total of an additional 10 years). At lease inception, the Company determined it was not reasonably certain to exercise any of the options to extend.

As of September 30, 2021, future lease payments related to our operating leases were as follows (in millions):

Year ending December 31:	Operating Leases	
Remaining 2021	\$	6.0
2022		14.3
2023		23.4
2024		21.4
2025		17.5
2026		17.6
Thereafter		89.7
Total lease payments		189.9
Less: Imputed interest		(34.9)
Total lease liability balance	\$	155.0

7. Acquisitions

Acquisition of Chartboost, Inc. (“Chartboost”)

On August 4, 2021, we acquired 100% of all issued and outstanding share capital of Chartboost, to acquire Chartboost’s mobile programmatic advertising and monetization platform and enhance Zynga’s advertising capabilities, for total consideration of \$232.7 million. The total purchase consideration included \$204.7 million in cash, \$25.0 million of cash that was deposited into an escrow account for a period of 15 months as security for certain indemnification obligations of the former Chartboost securityholders (the “Escrow Consideration”) and Zynga’s replacement of unvested Chartboost stock options (the “Zynga Replacement Stock Options”). The Zynga Replacement Stock Options allow the option holders to purchase up to 1,012,388 shares of Zynga’s Class A common stock, of which \$2.2 million of the total acquisition date fair value was allocated to the purchase consideration. Additionally, the total purchase consideration includes \$0.8 million of deferred cash consideration (the “Deferred Cash Consideration”).

In connection with the transaction, the Chartboost employees were paid cash bonuses totaling \$19.3 million, inclusive of payroll-related taxes. These employee bonuses were determined to primarily benefit the combined Zynga and Chartboost entity and were recognized by the Company separate from the business combination. One of the Chartboost employee bonuses included a two-year post-acquisition service period and is recognized as expense on a straight-line basis over the two-year period following the acquisition date. The remaining Chartboost employee bonuses were expensed immediately following the acquisition as there were no post-acquisition retention periods. The Chartboost employee bonuses are recognized as a component of research and development, sales and marketing or general and administrative expenses in our consolidated statements of operations based upon the respective employee’s job responsibilities.

The following table summarizes the acquisition date fair value of the assets, including intangible assets, liabilities assumed and related goodwill acquired from Chartboost (in millions):

	Estimated Purchase Price Allocation
Cash	\$ 12.2
Restricted cash	0.4
Accounts receivable	19.4
Prepaid expenses	0.6
Other current assets	2.6
Intangible assets, net:	
Developed technology, useful life of 5 years	99.8
Trade names, useful life of 8 years	12.8
Customer relationships, useful life of 4 years	2.7
Goodwill	129.3
Property and equipment	0.2
Right-of-use assets	0.5
Other non-current assets	0.1
Total assets acquired	<u>280.6</u>
Accounts payable	\$ (1.4)
Income taxes payable	(0.1)
Operating lease liabilities	(0.4)
Other current liabilities	(31.0)
Deferred tax liabilities, net	(14.4)
Non-current operating lease liabilities	(0.1)
Other non-current liabilities	(0.5)
Total liabilities	<u>(47.9)</u>
Total purchase price consideration	<u>\$ 232.7</u>
Fair value of Zynga Replacement Stock Options allocated to purchase consideration ⁽¹⁾	(2.2)
Total cash consideration ⁽²⁾	<u>\$ 230.5</u>

- (1) The fair value of the Zynga Replacement Stock Options allocated to purchase consideration was determined by calculating the acquisition-date fair value of the replaced unvested Chartboost stock options, multiplied by the ratio of the pre-combination service period to the total service period for the Zynga Replacement Stock Option. The fair value of the unvested Chartboost stock options was estimated using the Black-Scholes option-pricing model. The fair value of the Zynga Replacement Stock Options, less the value allocated to the purchase consideration, represents post-combination stock-based compensation expense. Refer to Note 12 – “Stockholders’ Equity” for further discussion.
- (2) The amount shown represents the cash paid at closing (which includes the Escrow Consideration), as well the Deferred Cash Consideration.

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.

The fair value of our intangible assets, net was determined using a risk-adjusted, discounted cash flow model. The weighted-average amortization period of the acquired intangible assets was 5.3 years at acquisition.

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 results of operations from Chartboost have been included in our consolidated statement of operations since the date of acquisition. Transaction costs incurred by the Company in connection with the Chartboost acquisition include professional fees and Chartboost employee bonuses. Transaction costs incurred during the three months ended September 30, 2021, were \$13.0 million, of which \$4.1 million, \$2.8 million and \$6.1 million were recorded within research and development, sales and marketing and general and administrative expenses, respectively, in our consolidated statements of operations. Transaction costs incurred during the nine months ended September 30, 2021 were \$14.3 million, of which \$4.1 million, \$2.8 million and \$7.4 million recorded within research

and development, sales and marketing and general and administrative expenses, respectively, in our consolidated statements of operations.

Acquisition of Uncosoft Yazılım Anonim Şirketi (“Uncosoft”)

On April 21, 2021, the Company’s subsidiary, Rollic, acquired 100% of all issued and outstanding share capital of Uncosoft, a Turkey joint stock company, in order to optimize its published game cost structure, for total purchase consideration of \$10.5 million. On the acquisition date, Rollic paid a total of \$12.5 million to the former owners of Uncosoft, of which \$2.0 million settled a pre-acquisition contractual obligation for amounts owed to Uncosoft under Rollic and Uncosoft’s pre-existing profit sharing arrangement.

The following table summarizes the acquisition date fair value of the assets, including intangible assets, and related goodwill acquired from Uncosoft (in millions):

	Estimated Purchase Price Allocation
Cash	\$ 0.1
Intangible assets, net:	
Developed technology, useful life of 1 year	1.8
Goodwill	9.0
Total assets acquired	10.9
Deferred tax liabilities	(0.4)
Total liabilities	(0.4)
Total cash consideration	<u>\$ 10.5</u>

Goodwill, which is 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.

Acquisition of Echtra Games, Inc.

On March 2, 2021, the Company acquired 100% of all issued and outstanding share capital of Echtra Games, Inc. (“Echtra”), to expand our cross-platform game development tools, technologies and experience, for total purchase consideration of \$21.1 million. The total purchase consideration included \$19.6 million in cash and \$1.5 million of unrestricted cash that was retained for a period of 12 months as security for general representations and warranties (the “Holdback Consideration”).

The following table summarizes the acquisition date fair value of the assets, including intangible assets, and related goodwill acquired from Echtra (in millions):

	Estimated Purchase Price Allocation
Prepaid expenses	\$ 0.1
Intangible assets, net:	
Developed technology, useful life of 10 years	10.7
Goodwill	10.3
Total assets acquired	21.1
Total cash consideration, including Holdback Consideration	<u>\$ 21.1</u>

The fair value of the developed technology intangible asset was determined using a cost to recreate approach. Goodwill, which is 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.

8. Goodwill and Intangible Assets, Net

The following table presents the changes to goodwill for the nine months ended September 30, 2021 (in millions):

	Goodwill
Balance as of December 31, 2020 ⁽¹⁾	\$ 3,160.8
Additions	148.6
Foreign currency translation adjustments ⁽²⁾	(12.8)
Balance as of September 30, 2021 ⁽¹⁾	<u>\$ 3,296.6</u>

⁽³⁾ There are no accumulated impairment losses at the beginning or end of the period.

⁽⁴⁾ The change is primarily related to translation adjustments on goodwill associated with the acquisitions of Small Giant and NaturalMotion, which have functional currencies denominated in the Euro and British Pound, respectively.

The details of our acquisition-related intangible assets as of September 30, 2021 and December 31, 2020 are as follows (in millions):

	September 30, 2021		
	Gross Carrying Value	Accumulated Amortization	Net Book Value
Developed technology	\$ 1,082.9	\$ (475.0)	\$ 607.9
Trademarks, branding and domain names	219.8	(55.5)	164.3
Developer and customer relationships	44.7	(10.6)	34.1
Total	<u>\$ 1,347.4</u>	<u>\$ (541.1)</u>	<u>\$ 806.3</u>

	December 31, 2020		
	Gross Carrying Value	Accumulated Amortization	Net Book Value
Developed technology	\$ 972.2	\$ (346.5)	\$ 625.7
Trademarks, branding and domain names	208.5	(35.5)	173.0
Developer and customer relationships	42.0	(2.6)	39.4
Total	<u>\$ 1,222.7</u>	<u>\$ (384.6)</u>	<u>\$ 838.1</u>

Our trademarks, branding and domain names intangible assets include \$6.1 million of indefinite-lived intangible assets as of September 30, 2021 and December 31, 2020. The remaining assets were, and continue to be, amortized on a straight-line basis. Amortization expense related to intangible assets was \$54.6 million and \$159.5 million for the three and nine months ended September 30, 2021, respectively. Comparatively, amortization expense related to intangible assets was \$46.0 million and \$78.7 million for the three and nine months ended September 30, 2020 respectively.

As of September 30, 2021, the weighted-average remaining useful lives of our acquired intangible assets were 3.8 years for developed technology, 5.8 years for trademarks, branding and domain names, 3.1 years for developer and customer relationships and 4.2 years in total, for all acquired intangible assets.

As of September 30, 2021, future amortization expense related to our intangible assets is expected to be recognized as follows (in millions):

Year ending December 31:	
Remaining 2021	\$ 56.1
2022	214.9
2023	199.9
2024	162.0
2025	102.9
2026	39.1
Thereafter	25.3
Total	<u>\$ 800.2</u>

9. Income Taxes

The provision for (benefit from) income increased \$24.4 million during the three months ended September 30, 2021 compared to the three months ended September 30, 2020. The increase was primarily driven by current period statutory income of our Peak subsidiary compared to a statutory loss in the prior period, further supplemented by an increase in expense related to the Base Erosion and Anti-Abuse Tax (“BEAT”). The overall increase was partially offset by the partial valuation allowance release from acquired Chartboost deferred tax liabilities.

The provision for (benefit from) income taxes increased \$36.0 million in the nine months ended September 30, 2021 compared to the nine months ended September 30, 2020. The increase was primarily driven by current period statutory income of our Peak subsidiary compared to a statutory loss in the prior period, higher statutory income of our Small Giant subsidiary and an increase in BEAT expense. The increase was partially offset by the partial valuation allowance release from acquired Chartboost deferred tax liabilities and the prior period income tax expense of \$9.4 million that did not repeat in 2021 related to Zynga’s revision of its prior tax position as a result of the *Altera Corp v. Commissioner* court ruling.

10. Debt

Convertible Senior Notes

On December 17, 2020, we issued \$874.5 million aggregate principal amount of 0% Convertible Senior Notes due 2026 (the “2026 Notes”) including the initial purchasers’ full exercise of their option to purchase an additional \$112.5 million principal amount of the 2026 Notes, in a private placement to qualified institutional buyers in an offering exempt from registration under the Securities Act of 1933. The net proceeds from the issuance of the 2026 Notes was \$856.8 million after deducting transaction costs.

On June 14, 2019, we issued \$690.0 million aggregate principal amount of 0.25% Convertible Senior Notes due 2024 (the “2024 Notes”), including the initial purchasers’ full exercise of their option to purchase an additional \$90.0 million principal amount of the 2024 Notes, in a private placement to qualified institutional buyers in an offering exempt from registration under the Securities Act of 1933. The net proceeds from the issuance of the 2024 Notes was \$672.2 million after deducting transaction costs.

The 2026 Notes and 2024 Notes are each governed by an indenture between us, as the issuer, and Wells Fargo Bank, National Association, as trustee. The 2026 Notes and 2024 Notes are senior unsecured obligations and rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to such notes; equal in right of payment to all of our existing and future liabilities that are not so subordinated; effectively junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities of our current or future subsidiaries (including trade payables). The indentures governing the 2026 Notes and 2024 Notes, as applicable, do not contain any financial covenants.

The 2026 Notes and 2024 Notes mature on December 15, 2026 and June 1, 2024, respectively, unless earlier converted, redeemed or repurchased in accordance with their terms respectively prior to the maturity date. The 2026 Notes do not bear regular interest, and the principal amount does not accrete, while interest is payable semiannually on the 2024 Notes in arrears on June 1 and December 1 of each year.

The 2026 Notes have an initial conversion rate of 76.5404 shares of our Class A common stock per \$1,000 principal amount of 2026 Notes, which is equal to an initial conversion price of approximately \$13.07 per share of our Class A common stock, subject to adjustment if certain events occur. The 2024 Notes have an initial conversion rate of 120.3695 shares of our Class A common stock per \$1,000 principal amount of 2024 Notes, which is equal to an initial conversion price of approximately \$8.31 per share of our Class A common stock, subject to adjustment if certain events occur. Following certain corporate events that occur prior to the maturity date or following our issuance of a notice of redemption, we will increase the conversion rate for a holder who elects to convert its 2026 Notes or 2024 Notes in connection with such corporate event or during the related redemption period in certain circumstances. Additionally, upon the occurrence of a corporate event that constitutes a “fundamental change” per the indentures, holders of the 2026 Notes and 2024 Notes may require us to repurchase for cash all or a portion of their respective 2026 Notes or 2024 Notes at a purchase price equal to 100% of the principal amount of the 2026 Notes and 2024 Notes plus accrued and unpaid interest.

Prior to the close of business on the business day immediately preceding September 15, 2026 with respect to the 2026 Notes and March 1, 2024 with respect to the 2024 Notes, the 2026 Notes and 2024 Notes will be convertible only under the following circumstances:

- during any calendar quarter, if the last reported sale price of our Class A common stock for at least 20 trading days in a period of 30 consecutive trading days ending on the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price of the applicable series of the 2026 Notes or 2024 Notes on each applicable trading day;
- during the five business-day period after any five consecutive trading-day period in which the trading price per \$1,000 principal amount of each applicable series of the 2026 Notes or 2024 Notes for such trading day was less than 98% of the product of the last reported sale price of our Class A common stock and the conversion rate of each applicable series of the 2026 Notes or 2024 Notes on each such trading day;
- if we call the 2026 Notes or 2024 Notes for redemption, at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; or
- upon the occurrence of specified corporate events described in the respective indentures.

On or after the dates specified above, holders of the 2026 Notes and 2024 Notes may convert all or any portion of their 2026 Notes and 2024 Notes regardless of the foregoing conditions. Upon any conversion, holders will receive cash, shares of our Class A common stock or a combination of cash and shares of our Class A common stock, at our election.

The Company may not redeem the 2026 Notes or 2024 Notes prior to December 20, 2023 and June 5, 2022, respectively. On or after those respective dates, the Company may redeem for cash all or any portion of the applicable series of the 2026 Notes or 2024 Notes, at its option, if the last reported sale price of our Class A common stock has been at least 130% of the conversion price of the applicable series of the 2026 Notes or 2024 Notes for at least 20 trading days during any 30 consecutive trading-day period ending on and including the trading day immediately preceding the date when the Company provides a notice of redemption at a redemption price equal to 100% of the principal amount of the applicable series of the 2026 Notes or 2024 Notes to be redeemed, plus any accrued and unpaid interest or special interest, as applicable.

As of September 30, 2021, the conditions allowing holders of the 2026 Notes or 2024 Notes to convert their respective series of the 2026 Notes and 2024 Notes have not been met and therefore both the 2026 Notes and 2024 Notes are not yet convertible.

We separately accounted for the liability and equity components of the 2026 Notes and 2024 Notes. We determined the initial carrying amount of the \$707.4 million liability component of the 2026 Notes by calculating the present value of the cash flows using an effective interest rate of 3.5%. We determined the initial carrying amount of the \$572.0 million liability component of the 2024 Notes by calculating the present value of the cash flows using an effective interest rate of 4.1%. The effective interest rates were determined based on non-convertible debt offerings, of similar sizes and terms, by companies with similar credit ratings and other observable market data (Level 2 inputs).

The amount of the equity component, representing the conversion option, was \$167.1 million for the 2026 Notes and \$118.0 million for the 2024 Notes and was calculated by deducting the initial carrying value of the liability component from the principal amount of the 2026 Notes and 2024 Notes, respectively. This difference represents a debt discount that is amortized to interest expense over the 6-year and 5-year contractual periods of the 2026 Notes and 2024 Notes, respectively, using the effective interest rate method. The equity components are not subsequently remeasured as long as they continue to meet the conditions for equity classification.

We allocated transaction costs related to the issuance of the respective series of the 2026 Notes and 2024 Notes to the liability and equity components using the same proportions as the initial carrying value of the respective series of the 2026 Notes and 2024 Notes. The respective transaction costs are then amortized to interest expense using the effective interest method over the terms of the respective series of 2026 Notes and 2024 Notes. Transaction costs initially attributable to the liability component of the 2026 Notes and 2024 Notes were \$14.3 million and \$14.8 million, respectively, while transaction costs attributable to the equity component of the 2026 Notes and 2024 Notes were \$3.4 million and \$3.1 million, respectively. The transaction costs attributable to the equity component are accounted for consistently with the equity component of the 2026 Notes and 2024 Notes.

The net carrying amount of the liability and equity components of the 2026 Notes and 2024 Notes as of September 30, 2021 were as follows (in millions):

	2024 Notes	2026 Notes	Total
Liability component:			
Principal	\$ 690.0	\$ 874.5	\$ 1,564.5
Unamortized debt discount	(66.4)	(147.0)	(213.4)
Unamortized transaction costs	(8.3)	(12.6)	(20.9)
Net carrying amount	\$ 615.3	\$ 714.9	\$ 1,330.2
Equity component, net of transaction costs	\$ 114.9	\$ 163.7	\$ 278.6

The net carrying amount of the liability and equity components of the 2026 Notes and 2024 Notes as of December 31, 2020 were as follows (in millions):

	2024 Notes	2026 Notes	Total
Liability component:			
Principal	\$ 690.0	\$ 874.5	\$ 1,564.5
Unamortized debt discount	(83.8)	(166.1)	(249.9)
Unamortized transaction costs	(10.5)	(14.2)	(24.7)
Net carrying amount	\$ 595.7	\$ 694.2	\$ 1,289.9
Equity component, net of transaction costs	\$ 114.9	\$ 163.7	\$ 278.6

Interest expense recognized related to the Notes was as follows (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Contractual interest expense	\$ 0.4	\$ 0.4	\$ 1.3	\$ 1.3
Amortization of debt discount	12.3	5.6	36.4	16.7
Amortization of transaction costs	1.2	0.7	3.8	2.1
Total	\$ 13.9	\$ 6.7	\$ 41.5	\$ 20.1

As of September 30, 2021, the estimated fair value of the 2026 Notes and 2024 Notes was \$849.1 million and \$788.0 million, respectively. We estimated the fair value based on the quoted market prices in an inactive market on the last trading day of the reporting period, which are considered Level 2 inputs.

Capped Call Transactions

In connection with the offering of the 2026 Notes and 2024 Notes, the Company entered into privately negotiated capped call options with certain counterparties (the “2026 Capped Calls” and “2024 Capped Calls”, respectively). The 2026 Capped Calls have an initial strike price of approximately \$13.07 per share, subject to certain adjustments, which corresponds to the initial conversion price of the 2026 Notes and an initial cap price of \$17.42 per share, subject to certain adjustments. The 2026 Capped Calls are intended to reduce the potential economic dilution of approximately 66.9 million shares to our Class A common stock upon any conversion of the 2026 Notes and/or offset any cash payments we make in excess of the principal amount of converted notes with such reduction and/or offset, as the case may be, subject to a maximum based on the cap price. The cost of \$63.0 million incurred in connection with the 2026 Capped Calls was recorded as a reduction to additional paid-in capital.

The 2024 Capped Calls have an initial strike price of approximately \$8.31 per share, subject to certain adjustments, which corresponds to the initial conversion price of the 2024 Notes and an initial cap price of \$12.54 per share, subject to certain adjustments. The 2024 Capped Calls are intended to reduce the potential economic dilution of approximately 83.1 million shares to our Class A common stock upon any conversion of the 2024 Notes and/or offset any cash payments we make in excess of the principal amount of converted notes with such reduction and/or offset, as the case may be, subject to a maximum based on the cap price. The cost of \$73.8 million incurred in connection with the 2024 Capped Calls was recorded as a reduction to additional paid-in capital.

As both the 2026 Capped Calls and 2024 Capped Calls are considered indexed to our own stock and are equity classified, therefore they are recorded in stockholders’ equity and are not accounted for as derivatives.

Convertible Senior Notes and Capped Call Transactions – Impact on Earnings per Share

The Company computes the potentially dilutive impact of the shares of Class A common stock related to the 2026 Notes and 2024 Notes using the treasury stock method, as we intend and have the ability to settle the principal amount of the 2026 Notes and 2024 Notes in cash upon conversion. However, the 66.9 million shares initially underlying the conversion option of the 2026 Notes and the 83.1 million shares initially underlying the conversion option of the 2024 Notes do not have an impact on our diluted earnings per share unless the average market price of our Class A common stock exceeds the respective conversion price of the 2026 Notes and 2024 Notes during a period of net income.

The 2026 Capped Calls and 2024 Capped Calls are excluded from the calculation of diluted earnings per share, as they would be antidilutive under the treasury stock method.

Credit Facility

In December 2020, the Company entered into a credit agreement (the “2020 Credit Agreement”) with certain financial institutions that provides for a three-year revolving credit facility in an aggregate principal amount of up to \$425.0 million and is secured by a blanket lien on the Company’s assets. The Company may borrow, repay and re-borrow funds under the 2020 Credit Agreement until December 31, 2023, at which time the 2020 Credit Agreement will terminate, and all outstanding revolving loans, together with all accrued and unpaid interest, must be repaid. The Company may use the proceeds of future borrowings under the 2020 Credit Agreement for general corporate purposes.

Under the 2020 Credit Agreement, 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. 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.

As of September 30, 2021, we had no amounts outstanding under the 2020 Credit Agreement.

11. Other Current and Non-Current Liabilities

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

	September 30, 2021	December 31, 2020
Contingent consideration payable	\$ 253.7	\$ 323.6
Accrued payables from acquisitions	137.5	—
Accrued accounts payable	64.2	58.1
Accrued compensation liability	48.8	61.7
Value-added taxes payable	6.8	6.4
Other current liabilities	41.2	12.6
Total other current liabilities	<u>\$ 552.2</u>	<u>\$ 462.4</u>

Our accrued compensation liability represents employee bonus and other payroll withholding expenses, while other current liabilities include various expenses that we accrue for sales and other taxes, customer deposits, accrued vendor expenses and deferred consideration payable from acquisitions.

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

	September 30, 2021	December 31, 2020
Deferred consideration payable from acquisitions	\$ 25.3	\$ 24.4
Uncertain tax positions, including interest and penalties	25.0	24.8
Contingent consideration obligation	—	213.6
Accrued payables from acquisitions	25.0	136.0
Other non-current liabilities	3.0	2.3
Total other non-current liabilities	<u>\$ 78.3</u>	<u>\$ 401.1</u>

12. Stockholders' Equity

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

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Cost of revenue	\$ 0.8	\$ 0.6	\$ 2.0	\$ 1.5
Research and development	29.9	25.4	83.0	48.6
Sales and marketing	4.4	4.0	13.0	11.0
General and administrative	9.5	8.8	27.0	23.8
Total stock-based compensation expense	\$ 44.6	\$ 38.8	\$ 125.0	\$ 84.9

Stock Option Activity

The following table shows stock option activity for the nine months ended September 30, 2021 (in millions, except weighted-average exercise price and weighted-average contractual term):

	Outstanding Options			
	Stock Options	Weighted-Average Exercise Price (per option)	Aggregate Intrinsic Value of Stock Options Outstanding	Weighted-Average Contractual Term (in years)
Balance as of December 31, 2020	30.1	\$ 3.46	\$ 193.1	6.43
Granted	1.0	2.93		
Forfeited, expired and cancelled	—	—		
Exercised	(2.0)	2.96		
Balance as of September 30, 2021	29.1	\$ 3.47	\$ 118.4	5.83

The following table presents the weighted-average grant date fair value and related assumptions used to estimate the fair value of the Zynga Replacement Stock Options:

	Three and Nine Months Ended September 30, 2021
Expected term, in years	5.6
Risk-free interest rates	0.7%
Expected volatility	34.2%
Dividend yield	—
Weighted-average estimated fair value of options granted ⁽¹⁾	\$ 7.21

(1) Of the total the weighted-average estimated fair value of the Zynga Replacement Stock options, \$5.10 was allocated to the post-combination value.

RSU Activity

The following table shows a summary of RSU activity for the nine months ended September 30, 2021, which includes performance and market-based awards (in millions, except weighted-average grant date fair value):

	Outstanding RSUs		
	Shares	Weighted-Average Grant Date Fair Value (per share)	Aggregate Intrinsic Value of Unvested RSUs
Unvested as of December 31, 2020	64.5	\$ 7.43	\$ 636.0
Granted	21.8	10.12	
Vested	(16.8)	6.36	
Forfeited	(3.1)	6.92	
Unvested as of September 30, 2021	66.4	\$ 8.61	\$ 500.0

Performance-Based RSUs

On March 15, 2021, the Company granted performance-based awards to certain executives (the “2021 Performance RSUs”). The number of shares earned will range from 0% to 150% of the target number of shares granted, depending on an adjusted operating cash flow metric for the year ended December 31, 2021 relative to pre-established thresholds. Shares earned (if any) based on the level of achievement will vest over a period of four years following the grant date, with 25% vesting on the one year anniversary of the grant date and the remaining quarterly thereafter, subject to continued service by the employees. The target number of shares granted totaled 1.2 million.

The Company recognizes stock-based compensation expense for the 2021 Performance RSUs using the accelerated attribution method over the requisite service period. The amount of stock-based compensation is determined based on the probability of achievement of the pre-established thresholds at each reporting period. If necessary, at each reporting period, the Company records a cumulative catch-up adjustment to reflect any revised estimates regarding the probability of achievement.

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 is authorized to remain in effect until April 2022 and 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 and nine months ended September 30, 2021, no share repurchases were made under the 2018 Share Repurchase Program. As of September 30, 2021, we had \$173.8 million remaining under the 2018 Share Repurchase Program.

All of our previous 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 nine months ended September 30, 2021 (in millions):

	Foreign Currency Translation	Unrealized Gains (Losses) on Available-For- Sale Marketable Debt Securities	Total
Balance as of December 31, 2020	\$ (50.8)	\$ 0.1	\$ (50.7)
Other comprehensive income (loss) before reclassifications	(24.6)	(0.1)	(24.7)
Amounts reclassified from accumulated other comprehensive income (loss)	—	—	—
Net other comprehensive income (loss), net of tax	(24.6)	(0.1)	(24.7)
Balance as of September 30, 2021	\$ (75.4)	\$ —	\$ (75.4)

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

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 RSUs, unvested performance and market-based RSUs, ESPP withholdings and convertible debt instruments. 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 millions, except per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
BASIC AND DILUTED:				
Net income (loss) attributable to common stockholders	\$ (41.7)	\$ (122.2)	\$ (36.9)	\$ (376.4)
Weighted-average common shares outstanding	1,097.1	1,076.7	1,090.4	995.6
Net income (loss) per share attributable to common stockholders	\$ (0.04)	\$ (0.11)	\$ (0.03)	\$ (0.38)

The following weighted-average employee equity awards and convertible debt instruments were excluded from the calculation of diluted net income (loss) per share because their effect would have been anti-dilutive for the periods presented (in millions):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2021	2020	2021	2020
Stock options and employee stock purchase plan	29.1	30.9	28.9	30.9
RSUs (including performance and market-based awards)	67.3	69.8	68.0	53.0
Convertible senior notes	7.1	8.9	14.2	—
Total	103.5	109.6	111.1	83.9

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 September 30, 2021, future minimum contractual royalty payments due to licensors and marketing commitments for the licensed products are as follows (in millions):

Year ending December 31:	
Remaining 2021	\$ 10.3
2022	8.3
2023	10.4
2024	—
2025	10.0
Thereafter	—
Total	\$ 39.0

Other Purchase Commitments

We have entered into several contracts primarily for hosting of data systems and other services. As of September 30, 2021, future minimum purchase commitments that have initial or remaining non-cancelable terms are as follows (in millions):

Year ending December 31:	
Remaining 2021	\$ 12.5
2022	42.9
2023	33.6
2024	16.5
Thereafter	—
Total	\$ 105.5

Excluded from tables above is our uncertain income tax position liability of \$25.0 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.

On September 12, 2019, the Company announced that an incident had occurred that may have involved player data (the "Data Incident"). Upon our discovery of the Data Incident, an investigation immediately commenced and advisors and third-party forensics firms were retained to assist. The investigation revealed that, during the third quarter of 2019, outside hackers illegally accessed certain player account information and other Zynga information, and that no financial information was accessed. The Company has provided notifications to players, investors, regulators and other third parties, where we believe notice was required or appropriate. The Company has exchanged correspondence with certain regulators as a result of the incident. The Company has also received and has responded to data subject access requests from certain European Union players of Zynga's games.

Since March 3, 2020, five consumer class action complaints have been filed in connection with the Data Incident in federal court. On March 3, 2020, two plaintiffs – minor "I.C." (acting through his parent Nasim Chaudhri) and Amy Gitre – filed a class action complaint arising out of the Data Incident (the "*Chaudhri* complaint"), generally alleging that Zynga failed to reasonably safeguard certain player information, including names, email addresses, and passwords (among other items); failed to provide them with timely notification of the breach; and made misleading representations concerning the safety and security of plaintiffs' personal information. Plaintiffs allege claims against Zynga under several state law theories, including negligence, intrusion upon seclusion, failure to comply with data breach notification statutes, and unjust enrichment, and they seek injunctive relief and damages. Zynga filed a motion to compel arbitration and arbitration-related discovery on May 8, 2020.

On March 23, 2020, plaintiffs Carol Johnson and Lisa Thomas filed a second class action complaint in the Northern District of California federal court (the "*Johnson* complaint"). Similar to the *Chaudhri* complaint, the *Johnson* plaintiffs – residents of Missouri and Wisconsin – assert Zynga failed to adequately protect certain player information, including names, email addresses, and passwords (among other items). Plaintiffs contend that, despite Zynga's representations in its privacy policy that sensitive player information would be adequately protected, plaintiffs' passwords were stored using inadequate hashing methods or in plain text. Plaintiffs allege that the lack of adequate security measures caused them harm as a result of the Data Incident, and they assert numerous various claims against Zynga, including claims for negligence, negligence per se, unjust enrichment, declaratory relief, breach of confidence, breach of contract and implied contract, violations of California's Unfair Competition Law ("UCL", CGL 17200, et seq.), and state-specific violations of Missouri's Merchandising Practices Act and Wisconsin's Deceptive Trade Practices Act. Plaintiffs seek damages, as well as declaratory and injunctive relief. On May 26, 2020, Zynga filed a motion to compel arbitration and arbitration-related discovery.

On April 15, 2020, plaintiffs Joseph Martinez IV and Daniel Petro, residents of Colorado and Iowa, filed a third class action complaint in the Northern District of California (the "*Martinez* complaint"). Plaintiffs allege they are longtime Zynga players who were affected by the Data Incident. Similar to the *Chaudhri* and *Johnson* plaintiffs, the *Martinez* plaintiffs generally allege that Zynga failed to adequately store and protect or otherwise secure certain player information, including names, email addresses, and passwords (among other items); that Zynga used outdated and improper password encryption methods; that Zynga failed to adequately provide notice of the Data Incident; and that they have been harmed as a result of the Data Incident. Like the *Johnson* and *Chaudhri* plaintiffs, the *Martinez* plaintiffs assert claims for negligence, negligence per se, and unjust enrichment, as well as contractual claims, and claims for relief under multiple state consumer protection statutes. Additionally, the *Martinez* plaintiffs also assert misrepresentation and omission claims under California's false advertising law and the California Consumer Legal Remedies Act. Plaintiffs seek injunctive and monetary relief on behalf of a nationwide class. Zynga responded to the *Martinez* complaint by filing a motion to compel arbitration on June 19, 2020.

On June 9, 2020 plaintiffs James Oeste and Marissa Oeste, both residents of Maryland, filed a fourth class action complaint in the Northern District of Maryland (the "*Oeste* complaint"). Plaintiffs allege they were Zynga players who were affected by the Data

Incident. Similar to all the foregoing plaintiffs, the *Oeste* plaintiffs seek to represent a nationwide class and generally allege that Zynga failed to adequately or reasonably protect certain player information, including names, email addresses, and passwords (among other items); that Zynga used outdated or improper password hashing methods; that Zynga failed to adequately provide notice of the Data Incident; and that they have been harmed as a result of the Data Incident. The *Oeste* plaintiffs assert claims for contractual breach, negligence, negligence per se, invasion of privacy, and claims for relief under California consumer protection and unfair competition statutes. Zynga responded to the complaint on August 31, 2020, with a motion to transfer the action to the Northern District of California. On May 5, 2021, the court granted Zynga's motion to transfer, and the case was transferred to the Northern District of California. The California district court has consolidated *Oeste* proceedings in connection with the other already pending cases before the court.

On August 13, 2020, plaintiff Christopher Rosiak filed a fifth class action in the Northern District of California (the "*Rosiak* complaint"). Plaintiff alleges similar and analogous claims to those in the *Martinez* (and others) actions pending in the Northern District, alleging that he suffered harm as a result of Zynga's data breach. Plaintiff Rosiak alleges multiple state law claims, including contract-based claims, negligence, and violation of California's unfair competition, false advertising, and consumer protection statutes.

On January 6, 2021, the Northern California district court issued an order in three of the above actions—*Chaudhri*, *Johnson*, and *Martinez*—denying Zynga's motions to compel arbitration without prejudice, and granting an alternative request for preliminary arbitration-related discovery that Zynga had made in connection with its motions. Plaintiffs were ordered to provide Zynga with plaintiffs' identifying information. Following a status hearing before the court as to all actions pending before it, plaintiffs filed an amended and consolidated complaint in connection with the *Chaudhri*, *Johnson*, and *Martinez* complaints, as well as in connection with the *Rosiak* complaint. The amended and consolidated complaint was filed in the Northern District of California on March 12, 2021.

In response to the amended and consolidated complaint, on April 21, 2021, the Company filed renewed motions to compel arbitration in connection with the claims alleged by three of the individual named plaintiffs in the *Chaudhri*, *Johnson*, and *Martinez* actions. On the same date, the Company also filed a motion to dismiss claims alleged by all remaining plaintiffs in those actions, and in the *Rosiak* action. Following oral argument held by the court on July 27, 2021, the court granted Zynga's motion to compel arbitration and granted the motion to dismiss with leave to amend. Plaintiffs filed their second amended consolidated complaint on August 27, 2021. Zynga filed a responsive motion to dismiss the amended complaint on September 20, 2021. A hearing on the motion scheduled for October 26, 2021 was vacated, to be reset as necessary. Zynga is awaiting either a rescheduled hearing or the court's decision on the motion.

On February 26, 2021, a class action lawsuit was filed in the United States District Court for the Northern District of California by named plaintiff Michael Owens (the "*Owens* complaint"), who purchased in-game currency in connection with his use of certain Zynga social slots games. The Zynga social slots games at issue included: *Hit It Rich! Slots*, *Black Diamond Casino*, *Wizard of Oz Slots*, *Willy Wonka Slots*, *Game of Thrones™ Slots Casino*, *Spin it Rich!*, *Princess Bride Slots* and *Riches of Olympus*. Plaintiff alleged that Zynga unlawfully developed, owned, and operated games that qualify as unlawful slot machines under California Penal Code section 330b; and that Zynga "developed, owned, operated, and controlled" such in violation of California Penal Code sections 330, *et seq.*, the Illegal Gambling Business Act (18 U.S.C. § 1955), and the Unlawful Internet Gambling Enforcement Act of 2006 (31 U.S.C. §§ 5361-5367). Plaintiff also alleged that Zynga unlawfully designed and marketed its social slots games in order to target individuals with addictive tendencies; and that Zynga implemented game features that violated state consumer protection laws. Plaintiff sought money damages, restitution, disgorgement and other remedies, as well as injunctive relief. Plaintiff filed an amended complaint on March 29, 2021, including claims by additional named plaintiffs Jennie Plumley, Jon Schweitzer, Charlie Finlay and Melissa Irelan. On May 4, 2021 the Company filed a motion to compel arbitration in response to the amended complaint. On June 21, 2021, all named plaintiffs filed a notice of voluntary dismissal, dismissing the complaint in its entirety without prejudice. Subsequent to the voluntary dismissal of plaintiffs' claims and during the third quarter of 2021, Zynga and the individual plaintiffs agreed to a mutual resolution of claims.

On March 2, 2021, a class-action lawsuit (the “*Bourgeois* complaint”) was filed in the Superior Court of Quebec, in the province of Montreal, Canada. The lawsuit, which was subsequently amended via an amended application on October 15, 2021, was filed by named plaintiff Gabriel Bourgeois, who purchased loot box items in connection with his use of the Marvel Strike Force and Pokemon Go! electronic and online games (plaintiff does not allege that he purchased a loot box in connection with any Zynga games). Plaintiff alleges that Zynga and multiple other gaming defendants have unlawfully developed, own, and operate an unlicensed gaming system, through the use of loot boxes in connection with their games. Plaintiff asserts that defendants have unlawfully offered loot boxes to the public in connection with their games; failed to properly disclose the odds of winning in connection with loot boxes; and failed to employ appropriate safeguards surrounding minors’ ability to purchase loot boxes. The specific Zynga games at issue—which plaintiff does not claim to have played—include *CSR Racing 2*, *Empires & Puzzles*, *Farmville: Country Escape* and *Dawn of Titans*. Plaintiff collectively asserts that by offering loot boxes, all defendants have violated the Criminal Code of Canada provisions that regulate gaming; the Competition Act of Canada; and various individual consumer protection laws of the individual Canadian provinces. Plaintiff seeks monetary damages in the form of compensatory and punitive damages, on his own behalf and that of a nationwide Canadian class.

On April 12, 2021, IGT and IGT Canada Solutions ULC (“IGT”) served Zynga with a lawsuit in the Western District of Texas federal court (the “IGT complaint”), accusing the Company of infringing United States Patent Nos. 8,708,791; 9,159,189; 7,168,089; 7,303,473; 8,795,064; and 8,266,212. The complaint alleges that the following games and certain features contained within them infringe on the IGT patents: *Zynga Poker*, *Words With Friends*, *Farmville* and Zynga social slots games, including specifically, *Hit It Rich! Slots*. On June 16, 2021, Zynga filed a partial motion to dismiss or strike plaintiff’s claims; and in the alternative, for a more definitive statement. IGT filed its opposition brief on June 30, 2021, and Zynga filed its reply on July 7, 2021. The parties are awaiting a hearing on the motion. On September 28, 2021, the court adopted discovery and scheduling deadlines that include a dispositive motion deadline of October 26, 2022, and an anticipated trial date of February 6, 2023.

The Company intends to defend itself vigorously against all claims asserted. At this time, the Company is unable to reasonably estimate the loss or range of loss, if any, arising from any of the above-referenced matters.

The Company is, at various times, also party to various other legal proceedings, claims and/or regulatory inquiries 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.

16. Subsequent Events

Acquisition of Beijing StarLark Technology Co., Ltd. (“StarLark”) and Lvy Technology Limited (“Lvy”)

On August 3, 2021, the Company executed a Master Business Transfer Agreement among Beijing Fotoable Technology Limited, Funjoy Technology Limited, Lvy, StarLark and certain other parties (the “StarLark Agreement”). On October 5, 2021 (the “StarLark Closing Date”), Zynga acquired Lvy, StarLark, the *Golf Rival* mobile game franchise and related other games and certain other specified assets and liabilities in a series of related closings, in exchange for consideration of \$276.0 million in cash, \$40.0 million of cash that was deposited into an escrow account for a period of 15 months as security for certain indemnification obligations of the sellers and the issuance of 20,009,528 shares of Class A common stock of Zynga, valued at \$145.7 million on the StarLark Closing Date.

Pursuant to the StarLark Agreement, on the StarLark Closing Date, the Company acquired Lvy and StarLark, with StarLark becoming a direct, wholly-owned subsidiary of Lvy and Lvy becoming a direct, wholly-owned subsidiary of Zynga.

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.

COVID-19 Update

We continue to remain focused on monitoring and assessing the COVID-19 pandemic including prioritizing the interests of our employees and players. As it relates to our employees, in mid-March 2020, our global workforce transitioned to remote working as we closed our offices, without any material disruption to our day-to-day operations. Our global offices largely continue to remain closed, with our global studios predominately operating remotely while we continue to assess the impact of the COVID-19 pandemic on the health and safety of our employees.

As it relates to our user base, towards the end of the second quarter of 2021, we observed a decline in players from cohorts that began playing certain of our games during the pandemic, as communities started to reopen and reduce their COVID-19 restrictions. Moving forward, we continue to believe the effects of the COVID-19 pandemic on society and player behavior are highly uncertain.

While we believe that we have been able to observe certain trends, we may not be able to determine the quantifiable impact specifically attributable to the COVID-19 pandemic on our results of operations and financial performance for the three and nine months ended September 30, 2021 and for future periods. See further discussion below in Part II, Item 1A. “Risk Factors” included in this Quarterly Report on Form 10-Q of the possible impact of the COVID-19 pandemic on our business.

Overview

We are a leading provider of social game services with approximately 183 million average mobile monthly active users (“MAUs”) in the third quarter of 2021. We develop, market and operate social games as live services played on mobile platforms (such as Apple’s iOS and Google’s Android), social networking platforms (such as Facebook and Snapchat), Personal Computers (PCs), consoles (such as Nintendo’s Switch) and other platforms. We also operate a mobile programmatic advertising and monetization platform. 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 third quarter of 2021, our average mobile monthly unique payers (“MUPs”) represented approximately 3.7% 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 49%, 48% and 45% of our online game revenue in 2020, 2019 and 2018, respectively. With respect to advertising and other revenue, our *Words With Friends* games generated a substantial portion of our advertising and other revenue in 2020, 2019 and 2018.

Acquisition of Chartboost, Inc. (“Chartboost”)

On August 4, 2021, we acquired 100% of all issued and outstanding share capital of Chartboost, for total consideration of \$232.7 million. The total purchase consideration included \$204.7 million in cash, \$25.0 million of cash that was deposited into an escrow account for a period of 15 months as security for certain indemnification obligations of the former Chartboost securityholders and Zynga’s replacement of unvested Chartboost stock options allowing the holders to purchase up to 1,012,388 shares of Zynga’s

Class A common stock, of which \$2.2 million of the total acquisition date fair value was allocated to the purchase consideration. Additionally, the total purchase consideration includes \$0.8 million of deferred cash consideration.

Chartboost is a mobile programmatic advertising and monetization platform, which includes a demand side platform, supply side platform and mediation capabilities. The Company expects the acquisition to meaningfully enhance its advertising capabilities.

Acquisition of Beijing StarLark Technology Co., Ltd. (“StarLark”) and Lvy Technology Limited (“Lvy”)

On August 3, 2021, the Company executed a Master Business Transfer Agreement among Beijing Fotoable Technology Limited, Funjoy Technology Limited, Lvy, StarLark and certain other parties (the “StarLark Agreement”), pursuant to which Zynga acquired, on October 5, 2021 (the “StarLark Closing Date”), Lvy, StarLark, the *Golf Rival* mobile game franchise and related other games and certain other specified assets and liabilities in a series of related closings, in exchange for consideration of \$276.0 million in cash, \$40.0 million of cash that was deposited into an escrow account for a period of 15 months as security for certain indemnification obligations of the sellers and the issuance of 20,009,528 shares of Class A common stock of Zynga, valued at \$145.7 million on the StarLark Closing Date.

Pursuant to the StarLark Agreement, on the StarLark Closing Date, the Company acquired Lvy and StarLark, with StarLark becoming a direct, wholly-owned subsidiary of Lvy and Lvy becoming a direct, wholly-owned subsidiary of Zynga.

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, which includes our mobile programmatic advertising and monetization platform. 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 family and friends, whether those individuals play for free or also purchase virtual items.

In 2021, our business continued generating a significant percentage of revenue and bookings through mobile platforms. In the nine months ended September 30, 2021, we estimate that 50% and 46% of our revenue and 51% and 46% of our bookings were generated on Apple and Google platforms, respectively, while in the same period of the prior year, we estimate that 49% and 46% of our revenue and bookings were generated on Apple and Google 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.

Advertising and other. Advertising revenue in our games primarily includes display advertisements, engagement advertisements and offers and branded virtual items and sponsorships. Advertising revenue also includes the net fees collected from our demand, supply and mediation advertising platforms. 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 (i.e. online game bookings) as deferred revenue and then recognize those bookings ratably 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 these advertising bookings are 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 various 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 millions):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Reconciliation of Revenue to Bookings:				
Revenue	\$ 704.7	\$ 503.3	\$ 2,105.0	\$ 1,358.8
Change in deferred revenue	(37.0)	124.7	(5.9)	212.2
Bookings	<u>\$ 667.7</u>	<u>\$ 628.0</u>	<u>\$ 2,099.1</u>	<u>\$ 1,571.0</u>

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

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
Reconciliation of Mobile Revenue to Mobile Bookings:				
Mobile revenue	\$ 685.1	\$ 484.2	\$ 2,045.0	\$ 1,303.8
Change in mobile deferred revenue	(35.8)	124.8	(4.9)	212.0
Mobile bookings	<u>\$ 649.3</u>	<u>\$ 609.0</u>	<u>\$ 2,040.1</u>	<u>\$ 1,515.8</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 around our social games is designed so that, as more players 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, 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 we believe collectively best reflect key audience metrics.

Consistent with our focus on mobile gaming platforms, we 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 to 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.

The table below shows average Mobile DAUs, Mobile MAUs, Mobile MUUs, Mobile MUPs and Mobile ABPU for the three and nine months ended September 30, 2021 and 2020:

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2021</u>	<u>2020</u>	<u>2021</u>	<u>2020</u>
	(users and payers in millions)			
Average Mobile DAUs(1)	38	31	39	25
Average Mobile MAUs(1)	183	83	184	74
Average Mobile MUUs(2)	34	35	35	42
Average Mobile MUPs(2)	1.2	1.3	1.3	1.3
Mobile ABPU	\$ 0.188	\$ 0.213	\$ 0.191	\$ 0.226

(1) We do not have the third party network login data to link an individual who has played under multiple user accounts for our hyper-casual games (which includes the games acquired from Rollic), our mobile messenger games (prior to the third quarter of 2021), *Puzzle Combat*, *Merge Magic!* and games acquired from Gram Games, Small Giant and Peak and accordingly, actual average Mobile DAU and Mobile MAU may be lower than reported due to the potential duplication of these individuals.

- (2) Excluded from average Mobile MUUs and Mobile MUPs are players of our hyper-casual games (which includes the games acquired from Rollic), our mobile messenger games (prior to the third quarter of 2021), *Puzzle Combat*, *Merge Magic!* and games acquired from Gram Games, Small Giant and Peak. These games are excluded to avoid potential double counting as our systems are unable to distinguish whether a player of these games is also a player of our other games during the applicable time periods.

Average Mobile DAUs and MAUs increased in the three months ended September 30, 2021 when compared to the same period of the prior year, primarily driven by contributions from the games acquired from Rollic in October 2020.

Average Mobile MUUs was relatively flat in the three months ended September 30, 2021 compared to the same period of the prior year. Average Mobile MUPs decreased primarily due to a decline in payers in our older mobile games, *CSR Racing 2* and *Zynga Poker*, partially offset by an increase in payers in *Harry Potter™: Puzzles & Spells*. Finally, Mobile ABPU decreased due to a larger increase in average Mobile DAUs relative to the increase in mobile bookings, primarily reflecting the addition of Rollic's hyper-casual games into our portfolio.

Other Metrics

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

	Three Months Ended September 30,	
	2021	2020
Average monthly unique mobile online game payer bookings (in millions) ⁽¹⁾	\$ 67	\$ 62
Average Mobile MUPs (in millions) ⁽²⁾	1.2	1.3
Average monthly unique mobile online game payer bookings per average Mobile MUP ⁽³⁾	\$ 54	\$ 47

- (1) Average monthly unique mobile online game payer bookings represent the monthly average amount of mobile online game bookings for the applicable quarter that we received through payment methods for which we can quantify the number of unique payers. Accordingly, mobile online game bookings from our hyper-casual games (which includes the games acquired from Rollic), our mobile messenger games (prior to the third quarter of 2021), *Puzzle Combat*, *Merge Magic!* and our games acquired from Gram Games, Small Giant and Peak are excluded.
- (2) Excluded from average Mobile MUPs are players of our hyper-casual games (which includes the games acquired from Rollic), our mobile messenger games (prior to the third quarter of 2021), *Puzzle Combat*, *Merge Magic!*, and games acquired from Gram Games, Small Giant and Peak. These games are excluded to avoid potential double counting as our systems are unable to distinguish whether a player of these games is also a player of our other games during the applicable time periods.
- (3) Average monthly unique mobile online game payer bookings per average Mobile MUP is calculated by dividing average monthly unique mobile online game payer bookings by average Mobile MUPs.

Average monthly unique mobile online game payer bookings increased in the three months ended September 30, 2021 compared to the same period of the prior year, primarily due to contribution from *Harry Potter™: Puzzles & Spells*, partially offset by a decline from *CSR Racing 2*. Average monthly unique mobile online game payer bookings per average Mobile MUP increased due to the increase in average monthly unique mobile online game payer bookings and decrease in average Mobile MUPs.

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 Mobile 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, 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.

Factors Affecting Our Performance

Platform agreements. Our games are primarily distributed, marketed and promoted through third parties, primarily Apple's App Store and the Google Play Store. 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 and Google platforms and expect to continue to do so for the foreseeable future as we launch more games for mobile devices. Apple and Google 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 the majority of 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. Further, as a result of the platform fees associated with online game bookings, our mobile online game revenue generally generates lower gross margins than our advertising and other revenue. Accordingly, the overall mix between online game revenue and advertising and other revenue may impact our gross margins.

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. 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 revenue and bookings 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. 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, we recognize the majority of 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.

Licensed branding. In addition to player acquisition costs, we utilize licensed intellectual property to grow and retain our player audience. We incur licensing fees related to the use of intellectual property within our games, and our gross 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 *Game of Thrones™ Slots Casino*, *Harry Potter: Puzzles & Spells*, *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 *Star Wars™*. 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 gross margins.

New market development. We are investing in new distribution channels, cross-platform play and international markets to expand our reach and grow our business. For example, we continue to expand our game publishing internationally, including the release of *Harry Potter: Puzzles & Spells* in Asia during 2020. 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, learning and development and total rewards programs against best practices, with the goal of building and retaining world class teams. For further discussion on our human capital, refer to Part I, Item I "Business" included in our previously-filed Annual Report on Form 10-K for the year ended December 31, 2020.

Results of Operations

In April 2021, Apple released a version update of iOS 14.5 that requires its users (and presumably users of future iOS versions), on an app-by-app basis, to explicitly opt-in to the use of identifier-for-advertising, a device identifier assigned by Apple to each of its devices and used by advertisers to attribute app installs to advertising campaigns, target users through user acquisition and deliver targeted ads. While we believe that we have been able to observe certain trends, including a meaningful increase in the adoption of iOS 14.5 by users, we may not be able to determine the quantifiable impact specifically attributable to the Apple version update on our results of operations and financial performance for the three and nine months ended September 30, 2021 and for future periods.

Revenue

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Online game:						
Mobile	\$ 552.8	\$ 418.0	32%	\$ 1,659.1	\$ 1,117.0	49%
Other ⁽¹⁾	18.3	18.0	2%	56.0	51.6	9%
Online game total	\$ 571.1	\$ 436.0	31%	\$ 1,715.1	\$ 1,168.6	47%
Advertising and other:						
Mobile	\$ 132.3	\$ 66.1	100%	\$ 385.9	\$ 186.8	107%
Other ⁽¹⁾	1.3	1.2	8%	4.0	3.4	18%
Advertising and other total	\$ 133.6	\$ 67.3	99%	\$ 389.9	\$ 190.2	105%
Total revenue	\$ 704.7	\$ 503.3	40%	\$ 2,105.0	\$ 1,358.8	55%

(1) Includes web for online game and web advertising revenue and other revenue for advertising and other.

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Total revenue increased \$201.4 million in the three months ended September 30, 2021 as compared to the same period of the prior year, while bookings increased \$39.7 million over the same period.

Mobile online game revenue and other online game revenue increased \$134.8 million and \$0.3 million, respectively, in the three months ended September 30, 2021, as compared to the same period of the prior year, resulting in a total online game revenue increase of \$135.1 million.

The increase in mobile online game revenue was primarily attributable to increases in mobile revenue from *Toon Blast* and *Toy Blast*, in the amounts of \$82.5 million and \$43.8 million, respectively, due to higher amortization of prior period deferred revenue and overall increase in bookings, as the games were acquired in July 2020. The increase was also attributable to higher amortization of prior period deferred revenue and overall increase in bookings from *Harry Potter™: Puzzles & Spells* in the amount of \$34.0 million, as the game was launched in September 2020, and *Zynga Poker* in the amount of \$5.5 million. The overall increase was offset by a decrease in revenue from *Merge Dragons!*, *Merge Magic!* and *CSR Racing 2* in the amounts of \$16.1 million, \$13.0 million and \$3.3 million respectively, due to the overall decrease in bookings and audience metrics in the games.

In the three months ended September 30, 2021, *Empires & Puzzles* and *Toon Blast* were our top online revenue-generating games and comprised 19% and 18%, respectively, of our online game revenue for the period. In the three months ended September 30, 2020, *Empires & Puzzles* and *Merge Dragons!* were our top online revenue-generating games and comprised 25% and 16% 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.

The estimated weighted average playing period of payers was ten months for the three months ended September 30, 2021, as compared to nine months for the three months ended September 30, 2020.

Mobile advertising revenue and other advertising and other revenue increased \$66.2 million and \$0.1 million, respectively, in the three months ended September 30, 2021, as compared to the same period of the prior year, resulting in a total advertising and other increase of \$66.3 million.

The increase in mobile advertising revenue was primarily due to a \$37.6 million increase in mobile in-game display advertising revenue and a \$28.5 million increase in revenue from mobile in-game offers, engagement advertisements and other revenue, both of which were primarily driven by the Rollic acquisition in October 2020.

International revenue as a percentage of total revenue was 40% and 38%, respectively, in the three months ended September 30, 2021 and 2020.

Nine Months Ended September 30, 2021 Compared to Nine Months September 30, 2020

Total revenue increased \$746.2 million in the nine months ended September 30, 2021 as compared to the same period of the prior year, while bookings increased \$528.1 million in the nine months ended September 30, 2021 as compared to the same period of the prior year.

Mobile online game and other online game revenue increased \$542.1 million and \$4.4 million, respectively, in the nine months ended September 30, 2021 as compared to the same period of the prior year, resulting in a total online game revenue increase of \$546.5 million.

The increase in mobile online game revenue was primarily attributable to increases in mobile revenue from *Toon Blast* and *Toy Blast*, in the amounts of \$276.8 million and \$142.5 million, respectively, due to higher amortization of prior period deferred revenue and overall increase in bookings, as the games were acquired in July 2020. The increase was also attributable to an increase in mobile revenue from *Harry Potter™: Puzzles & Spells* in the amount of \$80.0 million, due to higher amortization of prior period deferred revenue and overall increase in bookings, as the game was launched in September 2020. The increase was further supplemented by increases in revenue from *Empires & Puzzles* in the amount of \$45.1 million, due to higher amortization of prior period deferred revenue, and our social slots games, *Zynga Poker* and *Words With Friends*, in the amounts of \$23.1 million, \$11.8 million and \$9.5 million, respectively, due to the overall increase in bookings in these games. The overall increase was offset by a decrease in revenue from *Merge Dragons!* in the amount of \$40.9 million due to the overall decrease in bookings and audience metrics in the game.

The increase in other online game revenue was primarily attributable to increases in web revenue from *Hit It Rich! Slots* in the amount of \$3.7 million, due to the overall increase in bookings in the game.

In the nine months ended September 30, 2021, *Empires & Puzzles*, *Toon Blast* and *Merge Dragons!* were our top online revenue-generating games and comprised 20%, 17% and 10%, respectively, of our online game revenue for the period. In the nine months ended September 30, 2020, *Empires & Puzzles* and *Merge Dragons!* were our top online revenue-generating games and comprised 25% and 18% 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.

The estimated weighted average playing period of payers was ten months for the nine months ended September 30, 2021 and 2020.

Mobile advertising revenue and other advertising and other revenue increased \$199.1 million and \$0.6 million, respectively, in the nine months ended September 30, 2021, as compared to the same period of the prior year, resulting in a total advertising and other increase of \$199.7 million.

The increase in mobile advertising revenue was primarily due to a \$119.6 million increase in mobile in-game display advertising revenue and a \$79.4 million increase in revenue from mobile in-game offers, engagement advertisements and other revenue, both of which were primarily driven by the Rollic acquisition in October 2020. The increase in mobile advertising revenue was further supplemented by an increase in advertising revenue from *Words with Friends* and *Harry Potter™: Puzzles & Spells*, which launched in September of 2020.

International revenue as a percentage of total revenue was 40% and 39%, respectively, in the nine months ended September 30, 2021 and 2020.

Cost of revenue

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Cost of revenue	\$ 240.8	\$ 235.9	2%	\$ 754.8	\$ 561.4	34%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Cost of revenue increased \$4.9 million in the three months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to increases of \$8.6 million from the amortization of intangible assets, which was largely

driven by our acquisitions of Rollic and Chartboost in the third quarter of 2020 and third quarter of 2021, respectively, and \$3.1 million in hosting costs, partially offset by a decrease of \$7.8 million in payment processing fees from decreased online game bookings.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Cost of revenue increased \$193.4 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to increases of \$99.5 million in payment processing fees from increased bookings generated from mobile payment processors, which was predominately driven by the games acquired from Peak and the launch of *Harry Potter™: Puzzles & Spells*, \$80.7 million from the amortization of intangible assets, which was largely driven by our acquisitions of Peak, Rollic and Chartboost, \$6.0 million in hosting costs and \$5.5 million in royalty expense.

Research and development

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Research and development	\$ 143.5	\$ 165.9	(14)%	\$ 394.0	\$ 591.7	(33)%

Three Months Ended September 30, 2021 Compared to Three Months September 30, 2020

Research and development expenses decreased \$22.4 million in the three months ended September 30, 2021 compared to the same period of the prior year. The decrease was primarily attributable to a \$45.2 million net decrease in collective expense related to fair value adjustments associated with our Small Giant, Gram Games and Rollic contingent consideration obligations. The decrease was partially offset by increases of \$11.7 million in headcount-related expenses and \$4.5 million in stock-based compensation expense – both of which were primarily driven by our Rollic and Chartboost acquisitions, and \$4.1 million from employee bonus expense associated with our Chartboost acquisition.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Research and development expenses decreased \$197.7 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The decrease was primarily attributable to a \$284.6 million net decrease in collective expense related to fair value adjustments associated with our Small Giant, Gram Games and Rollic contingent consideration obligations. The decrease was partially offset by increases of \$36.7 million in headcount-related expenses and \$34.3 million in stock-based compensation expense – both of which were primarily driven by our Peak, Rollic and Chartboost acquisitions, \$9.8 million related to outside services and \$4.1 million from employee bonus expense associated with our Chartboost acquisition.

Sales and marketing

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Sales and marketing	\$ 216.7	\$ 187.0	16%	\$ 709.6	\$ 444.8	60%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Sales and marketing expenses increased \$29.7 million in the three months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to an increase of \$21.3 million in player acquisition costs, primarily related to the Rollic acquisition. The increase was further supplemented by increases of \$3.7 million in other marketing costs and \$2.8 million from employee bonus expense associated with our Chartboost acquisition.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Sales and marketing expenses increased \$264.8 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to an increase of \$247.5 million in player acquisition costs, primarily Peak and Rollic acquisitions, as well as the launch of *Harry Potter™: Puzzles & Spells*. The increase was further supplemented by increases of \$8.2 million in other marketing costs, \$4.6 million in headcount-related expenses, \$2.8 million from employee bonus expense associated with our Chartboost acquisition and \$2.0 million in stock-based compensation expense.

General and administrative

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
General and administrative	\$ 49.2	\$ 36.1	36%	\$ 122.8	\$ 103.5	19%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

General and administrative expenses increased \$13.1 million in the three months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to increases of \$4.0 million in acquisition-related transaction costs, \$3.1 million in headcount-related expenses and \$1.3 million in information technology-related expenses. The increase was further supplemented by lower overhead allocations out of general and administrative expenses of \$3.1 million, primarily driven by the planned exit of our San Francisco office space.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

General and administrative expenses increased \$19.3 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to increases of \$5.0 million in headcount-related expenses, \$3.3 million in stock-based compensation, \$2.8 million in information technology-related expenses, \$2.5 million in acquisition-related transaction costs and \$1.9 million in legal expenses. The increase was further supplemented by lower overhead allocations out of general and administrative expenses of \$2.3 million, primarily driven by the planned exit of our San Francisco office space.

Impairment related to real estate assets

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Impairment related to real estate assets	\$ 66.8	\$ —	NM	\$ 66.8	\$ —	NM

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Impairment related to real estate assets increased \$66.8 million in the three months ended September 30, 2021 compared to the same period of the prior year. The increase was attributable to impairment expense associated with the Company's right-of-use assets and property and equipment, net, recognized in connection with the planned exit of our San Francisco office space.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Impairment related to real estate assets increased \$66.8 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The increase was attributable to impairment expense associated with the Company's right-of-use assets and property and equipment, net, recognized in connection with the planned exit of our San Francisco office space.

Interest income

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Interest income	\$ 1.6	\$ 1.0	60%	\$ 5.0	\$ 10.2	(51)%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Interest income increased \$0.6 million in the three months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to a higher average amount invested in cash equivalents when compared to the prior period.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Interest income decreased \$5.2 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The decrease was primarily attributable to a lower average investment yield on our short-term investments, partially offset by a higher average amount invested in cash equivalents when compared to the prior period.

Interest expense

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Interest expense	\$ 14.8	\$ 7.3	103%	\$ 44.2	\$ 21.2	108%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Interest expense increased \$7.5 million in the three months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to an increase of \$6.9 million in non-cash interest expense related to the convertible notes due 2026.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Interest expense increased \$23.0 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily attributable to an increase of \$21.4 million in interest expense related to the convertible notes due 2026 and 2024.

Other income (expense), net

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Other income (expense), net	\$ (0.6)	\$ (3.1)	(81)%	\$ (0.8)	\$ (4.9)	(84)%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

Other income (expense), net decreased \$2.5 million in the three months ended September 30, 2021 compared to the same period of the prior year. The decrease was primarily attributable to a net increase of \$6.3 million in net foreign exchange transaction gains, primarily associated with the remeasurement of certain intercompany loans with the Company's foreign subsidiaries and other foreign currency fluctuations, partially offset by a net loss of \$3.9 million associated with our non-designated hedging foreign currency forward contract derivatives.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

Other income (expense), net decreased \$4.1 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The decrease was primarily attributable to a net increase of \$7.2 million in net foreign exchange transaction gains, associated with the remeasurement of certain intercompany loans with the Company's foreign subsidiaries and other foreign currency fluctuations, partially offset by a net loss of \$3.9 million associated with our non-designated hedging foreign currency forward contract derivatives.

Provision for (benefit from) income taxes

	Three Months Ended September 30,			Nine Months Ended September 30,		
	2021	2020	% Change	2021	2020	% Change
	(dollars in millions)			(dollars in millions)		
Provision for (benefit from) income taxes	\$ 15.6	\$ (8.8)	NM	\$ 53.9	\$ 17.9	201%

Three Months Ended September 30, 2021 Compared to Three Months Ended September 30, 2020

The provision for (benefit from) income taxes had a net change of \$24.4 million when comparing the three months ended September 30, 2021 compared to the same period of the prior year. The net change was primarily driven by current period statutory income of our Peak subsidiary compared to a statutory loss in the prior period, further supplemented by an increase in expense related to the Base Erosion and Anti-Abuse Tax (“BEAT”). The overall increase was partially offset by the partial valuation allowance release from acquired Chartboost deferred tax liabilities.

Nine Months Ended September 30, 2021 Compared to Nine Months Ended September 30, 2020

The provision for (benefit from) income taxes increased \$36.0 million in the nine months ended September 30, 2021 compared to the same period of the prior year. The increase was primarily driven by statutory income of our Peak subsidiary compared to a statutory loss in the prior period, higher statutory income of our Small Giant subsidiary and an increase in BEAT expense. The increase was partially offset by the partial valuation allowance release from acquired Chartboost deferred tax liabilities and the prior period income tax expense of \$9.4 million that did not repeat in 2021 related to Zynga’s revision of its prior tax position as a result of the *Altera Corp v. Commissioner* court ruling.

Liquidity and Capital Resources

	Nine Months Ended September 30,	
	2021	2020
	(in millions)	
Consolidated Statements of Cash Flows Data:		
Acquisition of property and equipment	\$ (6.8)	\$ (16.1)
Depreciation and amortization	170.7	87.1
Cash flows provided by (used in) operating activities	95.9	223.3
Cash flows provided by (used in) investing activities	(283.1)	175.9
Cash flows provided by (used in) financing activities	(57.4)	(90.4)

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, interest payments and principal repayments of our convertible notes and any share repurchase activity we choose to effect. We expect to finance our operations primarily 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, future growth through acquisitions or share repurchase activity, thus we may seek additional financing in the future.

As of September 30, 2021 and December 31, 2020, we had cash, cash equivalents and short and long-term investments of \$1.3 billion and \$1.6 billion, respectively, which generally consisted of cash, money market funds, corporate debt securities, mutual funds and foreign certificates of deposit and time deposits.

Hedging Instruments

In July 2021, we executed two forward contract derivatives designed to mitigate foreign currency exposures associated with two intercompany loans. Following their execution, we expect the derivatives to offset future foreign exchange transaction gains (losses) related to these intercompany loans.

Also, in July 2021, we executed a forward contract derivative designed to mitigate foreign exchange exposure associated with the invested capital of one of our foreign subsidiaries. Following its execution, we expect the derivative to offset future foreign exchange exposure in our net investment in the foreign subsidiary. The Company applied hedge accounting on the net investment forward contract.

Convertible Senior Notes and Capped Call Transactions

In December 2020, we issued \$874.5 million aggregate principal amount of 0% convertible senior notes due 2026, with an initial conversion rate of 76.5404 shares of our Class A common stock (equal to an initial conversion price of approximately \$13.07 per share), subject to adjustment if certain events occur (the “2026 Notes”). In June 2019, we issued \$690.0 million aggregate principal amount of 0.25% convertible senior notes due 2024, with an initial conversion rate of 120.3695 shares of our Class A common stock (equal to an initial conversion price of approximately \$8.31 per share), subject to adjustment if certain events occur (the “2024 Notes”).

The 2026 Notes and 2024 Notes are senior unsecured obligations and rank senior in right of payment to all of our indebtedness that is expressly subordinated in right of payment to such notes; equal in right of payment to all of our existing and future liabilities that are not so subordinated; effectively junior to any of our secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities of our current or future subsidiaries (including trade payables). The indentures governing the 2026 Notes and 2024 Notes, as applicable, do not contain any financial covenants.

The 2026 Notes mature on December 15, 2026 and the 2024 Notes mature on June 1, 2024, unless earlier converted, redeemed or repurchased in accordance with their terms respectively prior to the maturity date. The 2026 Notes do not bear regular interest, and the principal amount does not accrete. Interest is payable semiannually on the 2024 Notes in arrears on June 1 and December 1 of each year, beginning on December 1, 2019. The Company may not redeem the 2026 Notes or 2024 Notes prior to December 20, 2023 and June 5, 2022, respectively.

On or after those respective dates, the Company may redeem for cash all or any portion of the applicable series of the 2026 Notes or 2024 Notes, at its option, if the last reported sale price of our Class A common stock has been at least 130% of the conversion price of the applicable series of the 2026 Notes or 2024 Notes for at least 20 trading days during any 30 consecutive trading-day period ending on and including the trading day immediately preceding the date when the Company provides a notice of redemption at a redemption price equal to 100% of the principal amount of the applicable series of the 2026 Notes or 2024 Notes to be redeemed, plus any accrued and unpaid interest or special interest, as applicable.

As of September 30, 2021, the conditions allowing holders of the 2026 Notes or 2024 Notes to convert their respective series of the 2026 Notes and 2024 Notes have not been met and therefore both the 2026 Notes and 2024 Notes are not yet convertible.

In connection with the offering of the 2026 Notes and 2024 Notes, the Company also entered into privately negotiated capped call options with certain counterparties (the “2026 Capped Calls” and “2024 Capped Calls”, respectively). The 2026 Capped Calls have an initial strike price of approximately \$13.07 per share, subject to certain adjustments, which corresponds to the initial conversion price of the 2026 Notes and an initial cap price of \$17.42 per share, subject to certain adjustments. The 2026 Capped Calls are intended to reduce the potential economic dilution of approximately 66.9 million shares to our Class A common stock upon any conversion of the 2026 Notes and/or offset any cash payments we make in excess of the principal amount of converted notes with such reduction and/or offset, as the case may be, subject to a maximum based on the cap price.

The 2024 Capped Calls have an initial strike price of approximately \$8.31 per share, subject to certain adjustments, which corresponds to the initial conversion price of the 2024 Notes and an initial cap price of \$12.54 per share, subject to certain adjustments. The 2024 Capped Calls are intended to reduce the potential economic dilution of approximately 83.1 million shares to our Class A common stock upon any conversion of the 2024 Notes and/or offset any cash payments we make in excess of the principal amount of converted notes with such reduction and/or offset, as the case may be, subject to a maximum based on the cap price.

Credit Facility and Covenant Discussion

In December 2020, the Company entered into a credit agreement (the “2020 Credit Agreement”) with certain financial institutions that provides for a three-year revolving credit facility in an aggregate principal amount of up to \$425.0 million and is secured by a blanket lien on the Company’s assets. The Company may borrow, repay and re-borrow funds under the 2020 Credit Agreement until December 31, 2023, at which time the 2020 Credit Agreement will terminate, and all outstanding revolving loans, together with all accrued and unpaid interest, must be repaid. The Company may use the proceeds of future borrowings under the 2020 Credit Agreement for general corporate purposes.

Under the 2020 Credit Agreement, 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. 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.

As of September 30, 2021, we had no amounts outstanding under the 2020 Credit Agreement.

The 2020 Credit Agreement also requires compliance with certain covenants, all of which the Company was in compliance with as of September 30, 2021. Specifically, we are subject to the following financial covenants (certain terms used and described below are as defined and described in the 2020 Credit Agreement):

- *Consolidated Interest Coverage Ratio:* The Company is obligated to maintain a minimum consolidated interest coverage ratio of 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:* The Company is obligated to maintain a consolidated leverage ratio of up to an amount ranging from 4.25 to 1.00 to 3.50 to 1.00 as of the end of each fiscal quarter, in amounts decreasing through the term of the 2020 Credit Agreement. The consolidated leverage ratio is measured by dividing (a) our consolidated funded indebtedness as of the end of the applicable measurement period by (b) our consolidated EBITDA for the applicable measurement period.

Share Repurchases

In April 2018, we authorized the 2018 Share Repurchase Program for up to \$200.0 million of our outstanding Class A common stock. During the three and nine months ended September 30, 2021, no share repurchases were made and as of September 30, 2021, we had \$173.8 million remaining under the 2018 Share Repurchase Program. The 2018 Share Repurchase Program is authorized to remain in effect until April 2022.

Operating Activities

After our net loss of \$36.9 million is adjusted to exclude certain non-cash items, operating activities provided \$95.9 million of cash, cash equivalents and restricted cash during the nine months ended September 30, 2021. Significant non-cash, cash equivalent or restricted cash items included depreciation and amortization of \$170.7 million and stock-based compensation expense of \$125.0 million. Further, the non-cash expense associated with the increase in the Small Giant, Rollic and Gram Games contingent consideration obligations drove a \$51.1 million increase in our operating liabilities during the nine months ended September 30, 2021.

The change in our operating assets and liabilities during the nine months ended September 30, 2021 – excluding the impact from the aforementioned increase in our contingent consideration obligations – resulted in a \$286.0 million outflow of cash, cash equivalents and restricted cash, primarily due to the portion of the total acquisition-related contingent consideration payment to the former owners of Small Giant, Gram and Rollic included in operating activities in the amount of \$214.5 million, \$59.9 million and \$4.1 million, respectively.

Investing Activities

Investing activities used \$283.1 million of cash, cash equivalents and restricted cash during the nine months ended September 30, 2021. The primary outflow of cash, cash equivalents and restricted cash associated with investing activities was \$222.2 million associated with our Chartboost, Echtra and Uncosoft acquisitions. The outflow of cash, cash equivalents and restricted cash associated with investing activities was further supplemented by outflows of \$43.9 million for investment purchases, net of maturities, and \$6.8 million of capital expenditures, primarily related to leasehold improvements.

Financing Activities

Financing activities used \$57.4 million of cash, cash equivalents and restricted cash during the nine months ended September 30, 2021. The primary outflow of cash, cash equivalents and restricted cash associated with financing activities relates to the portion of the total acquisition-related contingent consideration payment to the former owners of Small Giant, Rollic and Gram included in financing activities in the amount of \$25.1 million, \$15.9 million and \$15.1 million, respectively.

Off-Balance Sheet Arrangements

We did not have any significant off-balance sheet arrangements during the three and nine months ended September 30, 2021.

Contractual Obligations (1)

Year ending December 31:	Operating Leases	Licensor and Marketing	Other	Total
Remaining 2021	\$ 6.0	\$ 10.3	\$ 12.5	\$ 28.8
2022	14.3	8.3	42.9	65.5
2023	23.4	10.4	33.6	67.4
2024	21.4	—	16.5	37.9
2025	17.5	10.0	—	27.5
2026	17.6	—	—	17.6
Thereafter	89.7	—	—	89.7
Total	\$ 189.9	\$ 39.0	\$ 105.5	\$ 334.4

(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 our consolidated statement of operations.

Lease Commitments

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

In August 2021, in consideration of the changing nature of the Company's need for office space for its workforce, the Company's Board of Directors approved a plan to sublease the Company's current 185,000 square foot San Francisco, California office space (the "San Francisco Office Building"), as the Company transitions to a hybrid in-office and remote employee work model. As a result of the Board of Director's decision and the accumulation of other factors, the Company recognized a \$66.8 million impairment loss during the third quarter of 2021. The impairment loss recorded included \$57.9 million related to the San Francisco Office Building right-of-use lease asset and \$8.9 million related to property and equipment, net associated with the San Francisco Office Building.

In the second quarter of 2021, the Company executed a lease for office space of approximately 62,000 square feet in San Mateo, California (the "San Mateo Office Building") over an approximate 11-year lease term (the "Office Lease Agreement"), with annual lease expense of approximately \$3.0 million beginning in June 2021. The Office Lease Agreement provides the Company two separate options to extend the lease for five years each (for a total of an additional 10 years). At lease inception, the Company determined it was not reasonably certain to exercise any of the options to extend. The Company anticipates being able to occupy the San Mateo Office Building beginning in the second quarter of 2022, following the completion of its planned tenant improvements. Based on information and estimates as of the date of this filing, the Company anticipates total capital expenditures of approximately \$20.0 million for its tenant improvements related to the San Mateo Office Building, of which \$7.8 million will be reimbursable by the landlord. The landlord's tenant improvement allowance is considered a lease incentive, and will be recognized as a reduction of lease expense ratably over the term of the lease.

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 \$25.0 million, which includes interest and penalties, as the Company cannot make a reasonably reliable estimate of the period of cash settlement.

Contingent Consideration Obligations

Under the original terms of the Small Giant and Rollic acquisitions, contingent consideration may be payable based on the achievement of certain future performance targets – and in the case of Rollic, bookings targets as well – 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.

With respect to the Rollic contingent consideration obligation, the Company executed an amendment to the Share Purchase Agreement with the former owners of Rollic in the second quarter of 2021 to accelerate the Company's acquisition of the remaining 20% ownership in Rollic and to set the total contingent consideration payment at \$60.0 million (the "Rollic Amendment"). In the third quarter of 2021, the Company acquired the remaining 20% ownership and paid \$20.0 million, with the remaining \$40.0 million to be paid in first quarter of 2022. At the date of the Rollic Amendment, the Company measured the remaining final obligation by calculating the present value of the final payments using a discount rate of 1.3%, commensurate with the remaining term. As of September 30, 2021, the estimated current liability was \$39.8 million.

With respect to the Small Giant contingent consideration obligation, during the first quarter of 2021, we paid \$239.6 million to the former owners of Small Giant for its performance during the second annual contingent consideration period. As of September 30, 2021, the estimated fair value of the remaining contingent consideration obligation was a \$213.9 million current liability.

With respect to the Gram Games contingent consideration obligation, the Company executed an amendment to the Share Purchase Agreement with the former owners of Gram Games in the fourth quarter of 2020 to set the final contingent consideration payment at \$75.0 million. In the third quarter of 2021, the Company paid \$75.0 million to settle the final contingent consideration obligation.

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, 2020. 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
- Impairment related to real estate assets

Impairment related to real estate assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate an asset's carrying value may not be recoverable. When the projected undiscounted cash flows estimated to be generated by those assets are less than their carrying amounts, the assets are adjusted to their estimated fair value and an impairment loss is recorded as a component of operating income.

Significant judgment is required to estimate the amount and timing of future cash flows and the relative risk of achieving those cash flows. Assumptions and estimates about future values and remaining useful lives are complex and often subjective. They can be affected by a variety of factors, including external factors such as industry and economic trends, and internal factors such as changes in our business strategy and our internal forecasts.

In the third quarter of 2021, as a result of the Company’s plan to sublease its current San Francisco, California office space as it transitions to a hybrid in-office and remote employee work model, we reassessed our asset groupings and evaluated the recoverability of our right-of-use and other lease related assets – including leasehold improvements, furniture and fixtures and computer equipment (collectively, the “San Francisco Office Asset Group”), and determined that the carrying value of the San Francisco Asset Group was not fully recoverable. As a result, we utilized discounted cash flow models to estimate the fair value of the San Francisco Asset Group and calculate the corresponding impairment loss.

The development of the discounted cash flow model used to estimate the fair value of the San Francisco Asset Group required the application of significant judgement in determining market participant assumptions, including the projected sublease income over the remaining lease term, expected downtime prior to the commencement of future subleases, expected rent concessions offered to future tenants and discount rates that reflected the level of risk associated with these future cash flows.

All other critical accounting policies and estimates

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, 2020 for a more complete discussion of our critical accounting policies and estimates.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

During the nine months ended September 30, 2021, there were no significant changes to our quantitative and qualitative disclosures about market risk, other than the foreign currency forward contract entered into during the third quarter of 2021 intended to manage certain of our foreign exchange risks, as discussed in Note 3 —“Financial Instruments” in Part I, Item I “Notes to Consolidated Financial Statements” of this Quarterly Report on Form 10-Q. However, should financial market conditions worsen in the future, including any potential impacts of the COVID-19 pandemic, investments in some financial instruments may pose risks arising from market liquidity and credit concerns, although we continue to believe that our current investment strategy has a low risk of future material impairment.

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, 2020 for a more complete discussion on the market risks we encounter, as well as Part II, Item 1A. “Risk Factors” included in this Quarterly Report on Form 10-Q.

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 September 30, 2021, 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 September 30, 2021 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We have not experienced any material impact to our internal controls over financial reporting despite the fact that most of our employees are working remotely due to the COVID-19 pandemic. We are continually monitoring and assessing the effects of the COVID-19 pandemic on our internal controls to minimize the impact on their design and operating effectiveness.

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, 2020.*

Summary of Risk Factors

Material risks that may affect our business, operating results and financial condition include, but are not necessarily limited to, those relating to:

Risks Related to our Business and Industry

- managing the risks related to the continuously evolving COVID-19 pandemic;
- our ability to entertain our players, develop new games, improve the experience of our existing games and successfully monetize our games;
- an industry that is intensely competitive and subject to rapid changes;
- our operating results, which are volatile and difficult to predict;
- our ability to successfully acquire or integrate acquired companies into our business or manage the growth associated with multiple acquisitions;
- our ability to continue to launch, innovate and enhance games that players like and attract and retain a significant number of players;
- our ability to grow our player base, or if player engagement declines, revenue, bookings and operating results will be harmed;
- our ability to manage our game economies properly;
- the proliferation of “cheating” programs and scam offers that seek to exploit our games and players;
- fraudulent or unauthorized sales or purchases of virtual items used in our games through third-party websites;
- maintaining awareness of our brand and games;
- our ability to develop new games and features that achieve success;
- our history of net losses and the possibility that our revenue, bookings and operating margins may decline;
- our reliance on assumptions and estimates to calculate certain of our key metrics;
- our core values of focusing on our players and acting for the long-term may conflict with the short-term expectations of analysts;
- our ability to attract, retain and motivate key personnel;
- the decline or stagnation of mobile devices as game platforms or mobile devices generally;
- our international operations, which are subject to increased challenges and risks;

Risks Related to Our Dependence on Third Parties

- maintaining a good relationship with our third-party platform providers, such as the Apple App Store and the Google Play Store;
- our reliance on third-party hosting and cloud computing providers, such as Amazon Web Services;
- competing for advertisements and offers that are incorporated into our free-to-play games and maintaining and improving our relationships with advertisers;
- managing companies and governmental agencies that may restrict access to platforms, our website, mobile applications or the Internet generally;
- our ability to acquire and maintain licenses to intellectual property;

Risks Related to Legal and Regulatory Compliance

- cybersecurity attacks, including breaches, computer viruses and computer hacking attacks;
- compliance with evolving laws and regulations, including those related to privacy, information security, data protection, tax, consumer protection and protection of minors;
- legal proceedings that may result in adverse outcomes;
- compliance with a variety of U.S. and foreign laws, many of which are unsettled and still developing;

Risks Related to Our Intellectual Property

- failure to efficiently protect or enforce our intellectual property rights or manage intellectual property disputes;
- current and future intellectual property disputes;

Risks Related to Our Indebtedness

- limitations imposed by and risks related to the Indenture for Notes (as defined below) and the capped call transactions;

Risks Related to Our Class A Common Stock

- the price of our common stock, which may be volatile and could fluctuate substantially;
- provisions in our charter documents and under Delaware law that could limit certain stockholder actions;
- our ability to implement and maintain effective internal control over financial reporting; and
- our intention to not pay dividends for the foreseeable future.

Risks Related to Our Business and Industry

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

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

As a result of the COVID-19 pandemic, we have temporarily closed Zynga offices around the world (including our corporate headquarters in San Francisco, California) and implemented travel restrictions. Towards the end of the first quarter of 2020, we implemented a remote working program across our global studios and supporting locations, and we engaged with significant vendors (such as Amazon), platform providers (such as Apple and Google), advertising partners (such as Facebook and Google) and other business partners to understand their operating conditions and continue to evaluate our business continuity plans. The full extent to which the COVID-19 pandemic and the various responses to it impact our business, operations and financial results will depend on numerous evolving factors that we may not be able to accurately predict, including: the duration and scope of the COVID-19 pandemic, including any potential future waves of the COVID-19 pandemic; governmental, business and individuals' actions that have been and continue to be taken in response to the COVID-19 pandemic; the availability and cost to access the capital markets; the

effect on our players and their willingness and ability to pay for our games and services; disruptions or restrictions on our employees' ability to work and travel; and interruptions related to our cloud networking and gaming infrastructure and partners, including impacts on Amazon Web Services, mobile application platform providers, advertising partners and customer service and support providers. During the COVID-19 pandemic, we may not be able to provide the same level of product features and customer support that our players expect from us, which could negatively impact our business and operations. While substantially all of our business operations can be performed remotely, many of our employees are juggling additional work-related and personal challenges, including preparing for a prolonged duration of remote working environments, adjusting communication and work practices to collaborate remotely with work colleagues and business partners, managing technical and communication challenges of working from home on a daily basis, looking after children as a result of remote-learning and school closures, making plans for childcare, and caring for themselves, family members or other dependents who are or may become ill. If we seek to access the capital markets or increase our borrowing, there can be no assurance that financing and credit may be available on attractive terms, if at all. We will continue to actively monitor the issues raised by the COVID-19 pandemic and may take further actions that alter our business operations, including as may be required by federal, state, local or foreign authorities or that we determine are in the best interests of our employees, players, partners and stockholders.

The COVID-19 pandemic and resulting social distancing, shelter-in-place and similar restrictions led to increased player engagement from current, lapsed and new players in our games relative to our quarterly forecast and historic trends. These increases in player activity may not be indicative of our financial and operating results in future periods. The effects of the COVID-19 pandemic on society and player behavior are highly uncertain. For example, primarily during the second quarter of 2020, we saw increased player engagement from current, lapsed and new players in our games relative to our quarterly forecast and historic trends. Since then, audience levels have started to return to levels more consistent with prior periods, while player engagement and monetization remain strong. These changes in player activity may not be indicative of our financial and operating results in future periods. Furthermore, there is no assurance that player behavior will not further decrease, including below historic levels, as the full impacts of the pandemic on society and the global economy become more clear. In 2021, we have seen the return of shelter-in-place and curfew mandates in certain geographies and other efforts to combat the ongoing pandemic, and there is no certainty how these developments may affect our operations and player behavior.

In addition to the potential direct impacts to our business, the global economy has experienced significant volatility as a result of the actions taken in response to COVID-19, and future government intervention remains uncertain. An uncertain or weakened global economy may impact our players and their purchasing decisions within our games, consumers' buying decisions across the globe and their impact on the allocation of advertising investments and the ability of our business partners to navigate this complex social health and economic environment, any of which could result in disruption to our business and results of our operations. We have experienced heightened levels of variability in the pricing of advertising both in terms of user acquisition and as it relates to our advertising revenues. If additional volatility or unexpected trends resulting in decreased pricing of advertising emerge, the revenue we make from advertisers paying to display ads in our games may be negatively impacted, particularly if the levels of player engagement in our games are not sufficient to offset these declines, and we may experience increased pressure on our overall margins, as our revenue may consist of higher contributions of sales of in-game virtual items.

The duration and extent of the impact from the COVID-19 pandemic depends on future developments that cannot be accurately predicted at this time, such as the severity and transmission rate of the virus and its variants, the existence of any additional waves of the COVID-19 pandemic, the extent and effectiveness of containment actions, continued progress towards widespread rapid testing and effective treatment alternatives and vaccinations, and the impact of these and other factors on our employees, players and business partners. If we are not able to respond to and manage the impact of such events effectively, our business may be harmed.

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 and Snapchat. 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 improving the experience of our existing games (frequently through new content and feature releases for our live services), developing new games and successfully monetizing our 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 the proceeds 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 be profitable, we need to generate sufficient revenue and bookings 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 that 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 revenue and 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;
- 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 and 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 entertainment 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, 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 games vary in size and include companies such as Activision Blizzard, AppLovin, Aristocrat, DoubleU, Electronic Arts, Epic Games, ironSource, Moon Active, NetEase, Netmarble, Niantic, Nintendo, Playrix, Playtika, SciPlay, Scopely, Take-Two Interactive Software, Tencent, Ubisoft, Voodoo SAS and others. As we expand our global operations and gaming offerings, we increasingly face competition from online game developers and distributors who have primarily focused on specific international markets, such as NetEase, Netmarble and Tencent in Asia, and high-profile companies with significant online presences with new and expanded gaming offerings, such as Apple, Google, Microsoft and Snap. In addition, other large companies that to date have not actively focused on mobile and social games, such as Amazon and Facebook, may decide to develop mobile and social games or partner with other developers. 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. Furthermore, with our acquisition of Chartboost, Inc. (“Chartboost”), our competitors also include mobile monetization and advertising platforms.

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, PC and console games, video streaming services, television, movies, sports, reading, audiobooks 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.

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, when or how quickly bookings from one of our games may begin to decline. This difficulty may be exacerbated in the short- to intermediate-term by increased uncertainty about player behavior related to the COVID-19 pandemic. These levels of player activity may not sustain over the short-term or longer-term, and there is no assurance that player behavior will not decrease, including below historic levels, as the full impacts of the COVID-19 pandemic on society and the global economy become clearer. In general, 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 declines are higher than expected in a particular quarterly period, we experience delays in the launch of new games or features and/or new games do not monetize well, we may not meet our expectations or the expectations of securities analysts or investors.

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 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 second quarter of 2018, we acquired Gram Games Teknoloji A.S. (“Gram Games”), in early 2019, we acquired Small Giant Games Oy (“Small Giant”), in July 2020, we acquired Peak Oyun Yazılım ve Pazarlama Anonim Şirketi (“Peak”) after having purchased its casual card game division in the fourth quarter of 2017, in October 2020 we acquired Rollic Games Oyun Yazılım ve Pazarlama Anonim Şirketi (“Rollic”), in August 2021 we acquired Chartboost, Inc. and in October 2021 we acquired the game studio Beijing StarLark Technology Co., Ltd. along with the *Golf Rival* franchise. Each of these acquisitions requires 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 of 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, including performing adequate due diligence while pandemic-related travel restrictions and social distancing requirements prevent in-office and in-person meetings and collaboration;
- 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, U.S.-based public company at companies that prior to acquisition may not have as robust controls, procedures and policies, particularly, with respect to the effectiveness of cyber and information security practices and incident response plans, compliance with data privacy and protection and other laws and regulations protecting the rights of players and customers, and compliance with U.S.-based economic policies and sanctions which may not have previously been applicable to the acquired company's operations;
- the difficulty in accurately forecasting and accounting for the financial impact of an acquisition transaction, including accounting charges 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 contingent consideration 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, cyber and 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. In addition, depending upon the duration and extent of shelter-in-place, travel and other business restrictions adopted by us and imposed by various governments in response to the COVID-19 pandemic, we have and will continue to encounter new challenges in evaluating future acquisitions and integrating personnel, business practices and company cultures. 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 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. Revenue and bookings 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. 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 in relation to evolving player behavior and preferences in response to the COVID-19 pandemic and as we develop games in new categories or new markets, including international markets. 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 a substantial amount of our revenue and if we fail to grow our player base, or if player engagement declines, revenue, bookings and operating results will be harmed.

Compared to all players who play our games in any period, only a small portion are paying players. For the third quarter of 2021, we had approximately 1.2 million average Mobile MUPs (excluding players of our hyper-casual games which includes the games acquired from Rollic, *Puzzle Combat*, *Merge Magic!*, and games acquired from Gram Games, Small Giant and Peak), who represented approximately 3.7% of our average Mobile MUUs. 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, (whether due to financial hardship as a result of an economic downturn, such as the disruption caused by the COVID-19 pandemic, or for any other reason), 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 make purchases in our games because of the perceived value of these virtual items, 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 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 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 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 detect, prevent or minimize these unauthorized or fraudulent transactions will be successful and that these actions will not increase over time.

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 game content, the third-party advertisements displayed in 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 advertisements 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. 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 revenue and bookings could be adversely affected.

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 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 September 30, 2021, we had an accumulated deficit of \$2.3 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. 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.

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, who are 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, engineering and data science. These employees are in high demand, and we devote significant resources to identifying, recruiting, hiring, training, successfully integrating and retaining them. Interviewing, hiring and integrating new employees while working remotely presents our teams with new challenges. 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 September 30, 2021, approximately 31% of our employees had been with us for less than one year and approximately 47% for less than two years. As part of our global remote working plans, throughout the duration of the COVID-19 pandemic, we have devoted, and will continue to devote, increased efforts to maintaining the collaborative culture of Zynga, including through the use of videoconferencing and other online communication and sharing tools, and each of our global studios and to monitoring the health, safety, morale and productivity of our employees, including new employees, as we evaluate the impacts of this changing situation on our business and employees. As we evaluate options for the post-pandemic re-opening of our offices, we face uncertainty as to what our future workplace will look like and our ability to hire, motivate and retain our employees, as we strive to balance the health and safety of our employees with our employees' preferences for collaboration and flexible work arrangements, while also maintaining efficient work streams, employee morale, and company culture.

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. Any 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. While we believe we compete favorably, competition for highly skilled employees is intense, particularly in the San Francisco Bay Area, where our headquarters is located. 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. 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 revenue and bookings 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 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 additional countries and 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;
- compliance with applicable foreign laws and regulations, including privacy laws (for example, the European Union's General Data Protection Regulation and the California Consumer Privacy Act of 2018) 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);
- 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 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;
- public health crises, such as the COVID-19 pandemic, which can result in varying impacts to our employees, players, vendors and commercial partners internationally;
- 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.

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 in the past 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 investment portfolio may become impaired by deterioration of the financial markets.

Our cash equivalent and investment portfolio is invested with a goal of preserving our access to capital, and generally consists money market funds, corporate debt securities, U.S. government and government agency debt securities, mutual funds, certificates of deposit and time deposits. We follow an established investment policy and set of guidelines to monitor and help mitigate our exposure to interest rate and credit risk. The policy sets forth credit quality standards, permissible allocations of certain sectors and limits our exposure to specific investment types. Volatility in the global financial markets can negatively impact the value of our investments. If financial markets experience volatility, investments in some financial instruments may pose risks arising from market liquidity and credit concerns. In addition, any disruption of the capital markets could cause our other income and expense to vary from expectations. Although we believe our current investment portfolio has a low risk of material impairment, we cannot predict future market conditions, market liquidity or credit availability, and can provide no assurance that our investment portfolio will remain materially unimpaired.

The occurrence of an earthquake, other natural disaster or other significant business interruption at or near any of our facilities could cause damage to our facilities and equipment and interfere with our operations.

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

Risks Related to Our Dependence on Third Parties

We rely on third-party platforms such as the Apple App Store and the Google Play Store 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 and the Google Play Store, and the virtual items we sell in our games are purchased using the payment processing systems of these platform providers. In 2020, we derived 49% of our revenue and 50% of our bookings on Apple platforms and 46% of our revenue and 46% of our bookings on Google platforms. In response to the ongoing COVID-19 pandemic, we have engaged with our partners at Apple, Google and other platform providers to understand their operations and have evaluated our business disruption plans. While we do not anticipate any interruption in their distribution platforms or ability to accept customer payments, any such disruptions, even temporary, may have material impacts on our business and operations.

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. 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, and in May 2019 Google revised its Play Store policies to require similar disclosures. As another example, in April 2021, Apple released iOS version 14.5 which requires its users (and presumably users of future iOS versions), on an app-by-app basis, to explicitly opt-in to the use of identifier-for-advertising, a device identifier assigned by Apple to each of its devices and used by advertisers to attribute app installs to advertising campaigns, target users through user acquisition, and deliver targeted ads. We are continuing to evaluate how these rules or changes may affect our business, operations and financial results.

Furthermore, our social casino games have been noted in purported class-action complaints against our third-party platform providers where we are not the named defendants. For example, in February 2021, plaintiffs filed a purported class-action lawsuit in a California federal court against Apple alleging that Apple violated several states’ gambling laws by allowing the plaintiffs to download and play our social casino games. Similar allegations have been made in suits filed by plaintiffs in several U.S. states against Apple and/or Google in connection with their distribution of social casino games, some of which include a reference to Zynga or its social casino games. These lawsuits, or similar suits in the future, could cause Google, Apple, or other third-party platform providers to deny our social casino games access to their platforms, or the platforms could seek to pass on liability, including defense costs, for these suits to us under the indemnity provisions in our agreements with such platforms, which could have a material adverse effect on our results of operations, cash flows, or financial condition.

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 revenue and bookings 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. In response to the ongoing COVID-19 pandemic, we have engaged with our partners at AWS to understand their operations and have evaluated our business disruption plans. In addition, since many of the technical specialists responsible for managing disruptions to our technology infrastructure are working from home in accordance with shelter-in-place orders issued due to the COVID-19 pandemic, the time required to remedy any interruption may increase. 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.

(* 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. Furthermore, our Chartboost subsidiary derives its revenue from business clients, many of which are mobile game publishers, who use Chartboost's programmatic mobile advertising and monetization platform. Such clients often engage with several mobile advertising platforms and networks concurrently, thus Chartboost's business faces significant competition.

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 simplifies the process for Apple users to opt out of behavioral targeting. In June 2020, Apple announced further changes, requiring its users with iOS 14 (and presumably future iOS versions) to request a user's permission to track them or to access their mobile device's identifier for advertising (IDFA). Those changes, known as Apple's AppTracking Transparency framework, went into effect in late April 2021, with the release of iOS 14.5. If users do not elect participate in functionality that supports the delivery of targeted advertising on their devices, our ability to deliver effective advertising campaigns on behalf of our advertisers could 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 both 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, and to the financial health of advertisers, who, as they experience downturns or uncertainty in their own business operations for various reasons, such as the economic effects resulting from the COVID-19 pandemic, may decrease their advertising spending.

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 *Game of Thrones™ Slots Casino*,

Harry Potter™: Puzzles & Spells, Hit It Rich! Slots, Wizard of Oz Slots and Wonka's World of Candy, and we are developing new games using licensed intellectual property such as *Star Wars™*.

Proprietary licenses typically limit our use of intellectual property to specific uses and for specific time periods, require time and attention of licensors in providing guidance and related approvals, and include other contractual obligations with which we must comply. We have and may continue to experience delays in working with licensors and their proprietary content as we partner with them to develop new games and features. While these delays have not been material to date, it is possible that the COVID-19 pandemic may divert executive attention and other resources from us or our licensing partners and presents other business challenges, such as dependence on the need for resources only available in physical office locations. 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 and Epic Games. 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 and Epic Games, 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.

Companies and governmental agencies may restrict access to platforms, 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 the Apple App Store, the Google Play Store, Facebook, Snapchat or our website to play our games. Companies and governmental agencies could block access to any platform, 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 Apple, Google, Facebook and our website or any social platform. 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.

We are subject to counterparty risk with respect to the capped call transactions.

The counterparties to the capped call transactions entered into in connection with the offering of the Notes (as defined below) are financial institutions, and we will be subject to the risk that one or more of the counterparties may default or otherwise fail to perform, or may exercise certain rights to terminate, their obligations under the capped call transactions. Our exposure to the credit risk of the counterparties will not be secured by any collateral. Global economic conditions have in the past resulted in the actual or perceived failure or financial difficulties of many financial institutions. If a counterparty to one or more capped call transactions becomes subject to insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at the time under such transactions. Our exposure will depend on many factors but, generally, our exposure will increase if the market price or the volatility of our Class A common stock increases. In addition, upon a default or other failure to perform, or a termination of obligations, by a counterparty, the counterparty may fail to deliver the shares of our Class A common stock required to be delivered to us under the capped call transactions and we may suffer adverse tax consequences or experience more dilution than we currently anticipate with respect to our Class A common stock. We can provide no assurances as to the financial stability or viability of the counterparties.

Risks Related to Legal or Regulatory Compliance

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, computer hacking and insider threats have become more prevalent in our industry, and experts have warned that the global disruption related to the COVID-19 pandemic and remote working conditions have resulted in increased threats and malicious activity. 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. Because of our prominence in the social game industry, we believe we are a particularly attractive target for hackers. Additionally, rapidly evolving technology and capabilities, evolving changes in the sources, capabilities and targets for cybersecurity attacks, as well as the increasing sophistication of cyber criminals increase the risk of material data compromise or business disruption. As cybersecurity threats continue to evolve, we may be required to expend significant additional

resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities. The inability to implement, maintain and upgrade adequate safeguards could have a material adverse effect on our business.

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 Amazon, Apple, Facebook, Google and Microsoft. We are subject to global 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. These laws and regulations may change or be interpreted and applied differently over time and from jurisdiction to jurisdiction. The costs of compliance with these laws, including, among others, the European Union's General Data Protection Regulation ("GDPR") and the California Consumer Privacy Act of 2018 ("CCPA"), 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, or compromise the integrity of, 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, may affect our ability to operate 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, each of which could be material.

In September 2019, we announced that an incident had occurred that involved player data (the "Data Incident"). Upon our discovery of the Data Incident, an investigation was immediately commenced and leading advisors and third-party forensics firms were retained to assist. The investigation revealed that, during the third quarter of 2019, outside hackers illegally accessed certain player account information and other Zynga information, and that no financial information was accessed. We provided notifications to players, investors, regulators and other third parties, where we believed notice was required or appropriate. We may continue to experience increased costs related to our response to the Data Incident and our efforts to further enhance our security measures. In addition, it is possible that the Data Incident may result in loss of players and partners, harm to our reputation, increased costs to maintain insurance coverage, devotion of substantial management time, litigation or regulatory enforcement, claims for indemnification obligations, future cybersecurity attacks and other potential liabilities. We are currently subject to consumer class action complaints filed in connection with the Data Incident, as further described in the section titled "Legal Matters" included in Note 15 — "Commitments and Contingencies" in the notes to the consolidated financial statements included herein. While we intend to defend ourselves vigorously against the claims asserted, we cannot anticipate the potential outcomes, costs and expenses associated with these and any future lawsuits. Although we maintain insurance, the amount of our insurance may not cover the costs associated with such consumer class actions.

(* 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 collection, storing, sharing, use, processing, disclosure, deletion and protection of personal information and other player data on the Internet and mobile platforms, and with our acquisition of Chartboost, Inc., we are subject to additional laws and contractual obligations relating to its advertising operations. The scope of these laws 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. Global privacy laws and regulations are constantly emerging and evolving and may change or be interpreted and applied differently over time and from jurisdiction to jurisdiction, resulting in greater compliance burdens and costs associated with efforts to comply. For example, the GDPR, which became effective in May 2018, created new individual privacy rights and imposed worldwide obligations on companies processing personal data of European Union 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 CCPA, which went into effect on January 1, 2020 and created new privacy rights for consumers residing in the state. On November 3, 2020, California voters approved an initiative that will modify the CCPA significantly when it goes into effect in 2022, resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply.

There is also increased attention being given to the collection of data from minors. For instance, the Children's Online Privacy Protection Act requires companies to obtain parental consent before collecting personal information from children under the age of 13. Additionally, the UK Age Appropriate Design Code, which may require changes to the design of, and personal data processing by, online services "likely to be accessed" by UK users under the age of 18, went into enforcement in September 2021. Compliance with global privacy-related laws, regulations, 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. 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. For example, in July 2020, Apple began removing games from its China App Store in order to comply with Chinese gaming regulations first introduced in 2016, requiring developers to obtain licenses from Chinese authorities prior to launching games that are paid for or have in-app purchases. Accordingly, the Zynga games which were previously available in the China App Store have been removed by Apple. While we are assessing options to bring Zynga games to China in the future, we note that Zynga's revenue and bookings from Apple's China App Store have not historically been significant.

We are also subject to evolving laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and/or receive certain data that is critical to our operations, including data shared between countries or regions in which we operate. For example, in July 2020, the European Union-U.S. Privacy Shield, on which we historically relied for the transfer of certain data from the European Union to the U.S., was invalidated by the Court of Justice of the European Union (CJEU). In addition, other bases upon which Zynga relies to legitimize the transfer of such data, such as Standard Contractual Clauses (SCCs), have been subjected to regulatory and judicial scrutiny. The CJEU upheld the validity of SCCs in July 2020 subject to certain conditions, and the European Commission issued new SCCs on June 4, 2021, which has resulted in, and will continue to result in, changes to our use of SCCs. Further regulatory guidance could result in additional changes over time. If one or more of the legal bases for transferring data from Europe to the United States is invalidated or the transfer frameworks are amended, if we are unable to transfer data between and among countries and regions in which we operate, or if we are restricted from sharing data among our products and services, it could affect the manner in which we operate and require us to change our data processing policies and measures, which may be burdensome and difficult to undertake successfully, and could adversely affect our financial results. 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 data of players and other individuals, may result in governmental investigations and enforcement actions, litigation or public statements against us by consumer advocacy groups or others and could cause our players to lose trust in us and other harm to our reputation, 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.

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, securities claims, privacy, data protection or law enforcement matters, tax matters, labor and employment claims, consumer protection claims, competition-related claims, commercial and indemnification claims, acquisition-related claims 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 and privacy, competition, taxation, intellectual property, export and national security, which are continuously evolving and developing. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly laws outside the U.S. There is a risk that existing or future 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, Brazil and other jurisdictions regarding whether certain game genres, such as social casino, or certain game mechanics, such as “loot boxes”, should be subject to a higher level or different type of regulation than other game genres or mechanics to protect consumers, in particular minors and persons susceptible to addiction, and, if so, what such regulation should include. For example, in 2018 a court 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. Subsequent to this ruling, additional purported class-action suits were filed against other social casino gaming companies for alleged violations of Washington State’s gambling and consumer protection laws, and some of the defendant companies have entered into settlement agreements to settle their respective lawsuits. In late 2020 and throughout 2021, several class action suits have been filed in multiple states in the U.S. against platforms and publishers alleging online social casino games violate various anti-gambling laws, including a February 2021 federal class action suit filed against Zynga in California alleging that our social slots games violate certain state anti-gambling and consumer protection laws. In Australia, a member of federal parliament introduced a bill in June 2020 seeking to ban social casino games in the country because, in part, his belief that such games groom children and young adults for real-money gambling later in life. If new social casino regulations are imposed, or other regulations are interpreted to apply to our social casino games, certain, or all, of our casino-themed games may become subject to such 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, the U.S. Federal Trade Commission (“FTC”) held a public workshop on loot boxes in August 2019, at least one bill has been introduced in the U.S. Senate that would regulate loot boxes in games marketed toward players under the age of 18, the United Kingdom’s Department for Digital, Culture, Media and Sport in September 2020 launched a call for evidence into the impact of loot boxes on in-game spending and gambling-like behavior, several class action suits have been filed in Brazil and in Canada against various companies for offering loot boxes in their games or platforms based in part on claims connecting or equating loot boxes to gambling (with Zynga being one of numerous defendants in a Canadian class action suit), and politicians have cited loot boxes as an example of recent technology innovation where government regulation is needed. In some of our games, such as *Empires & Puzzles*, *CSR Racing 2*, *Golf Rival*, *Harry Potter: Puzzles & Spells*, *Merge Dragons!*, *Merge Magic!* and *Zynga Poker*, 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 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, or regulation of currency, banking institutions, unclaimed property, or 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.

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

The United Kingdom left the European Union in 2020 (commonly referred to as “Brexit”). The effects of Brexit will depend on agreements, if any, the United Kingdom makes to retain access to European Union. 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 post-transition period relationship between the United Kingdom and 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 post-transition period relationship between the United Kingdom and 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 post-transition period relationship between the United Kingdom and the European Union could cause disruptions to and create uncertainty surrounding our business, including affecting our United Kingdom 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.

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

The tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax laws (including in response to the COVID-19 pandemic) or tax rulings, or changes in interpretations of existing laws, could cause us to be subject to additional income and non-income based taxes (such as payroll, sales, use, value-added, digital tax, net worth, property, and goods and services taxes), which in turn could materially affect our financial position and results of operations. For example, in December 2017, the U.S. federal government enacted the 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. Another example is the June 7, 2019 opinion issued in *Altera Corp v. Commissioner* by a three judge panel from the Ninth Circuit, reversing a 2015 U.S. Tax Court decision. The Ninth Circuit ruled in favor of the Commissioner, validating U.S. Treasury regulations that require parties to a qualified cost-sharing arrangement to include stock-based compensation in the cost pool. The taxpayer subsequently petitioned the Ninth Circuit for a rehearing en banc, and, on November 12, 2019, the Ninth Circuit denied such petition. On February 10, 2020, the taxpayer requested the U.S. Supreme Court to review the Ninth Circuit's decision, and, on June 22, 2020, the U.S. Supreme Court denied request for review. As a result of the Ninth Circuit's opinion being upheld, our ability to offset 2019 taxable income with net operating losses was reduced. For more information, see Note 9 – "Income Taxes" in the notes to the consolidated financial statements included herein.

In addition, the United States and 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. These proposals include changes to the existing framework to calculate income tax as well as proposals to change or impose new types of non-income taxes, including taxes based on a percentage of gross receipts such as digital service taxes.

Any significant changes to the taxation of our activities discussed above could increase our future worldwide effective tax rate or non-income taxes that may result in a material adverse effect on our business, financial condition, results of operations, or cash flows. Such changes may also apply retroactively to our historical operations and result in taxes greater than the amounts estimated and recorded in our financial statements.

We may have exposure to greater than anticipated tax liabilities.

Our tax obligations, including income and non-income taxes, are based in part on our corporate operating structure and intercompany arrangements, including the manner in which we develop, value, manage, protect 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. In the third quarter of 2020, we made changes to our international structure including migrating certain intellectual property back to the United States in order to align the global economic ownership of the intellectual property with our current and future business operations. Our current and historical 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, future 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 operations.

Risks Related to Our Intellectual Property

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 uses 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.

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. See the section titled “Legal Matters” included in Note 15 – “Commitments and Contingencies” in the notes to the consolidated financial statements included herein.

Risks Related to Our Indebtedness

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 invest in strategic initiatives, 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 offering additional security interests and undertaking restrictive covenants relating to our capital raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. In December 2020, we entered into a credit agreement with a syndicate of lenders 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. Additionally, the COVID-19 pandemic has caused disruption in capital markets, and if we seek to access additional capital or increase our borrowing, there can be no assurance that financing and credit may be available on favorable terms, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business, financial condition or results of operations may be harmed.

In addition, in June 2019, we issued \$690.0 million aggregate principal amount of 0.25% Convertible Senior Notes due 2024 (the “2024 Notes”) and in December 2020, we issued \$874.5 million aggregate principal amount of 0.00% Convertible Senior Notes due 2026 (the “2026 Notes”) and together with the 2024 Notes, the “Notes”). We may not have the ability to raise the funds necessary to settle conversions of the Notes in cash, to repurchase the Notes upon a fundamental change or to repay the Notes in cash at their maturity (if not earlier converted, redeemed or repurchased), and our future debt may contain limitations on our ability to pay cash upon conversions of the Notes or at their maturity or to repurchase the Notes. Holders of the Notes may require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change (as defined in the indenture under which the Notes were issued)

before the maturity date at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest thereon, if any. In addition, upon conversion of the Notes, unless we elect to deliver solely shares of our Class A common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the Notes being converted. Moreover, we will be required to repay the Notes in cash at their maturity unless earlier converted, redeemed or repurchased. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of the Notes surrendered therefor or pay cash with respect to the Notes being converted or at their maturity.

In addition, our ability to repurchase the Notes or to pay cash upon conversions of the Notes or at their maturity may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase the Notes at a time when the repurchase is required by the indenture or to pay cash upon conversions of the Notes or to repay the Notes at their maturity as required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our existing and future indebtedness. Moreover, the occurrence of a fundamental change under the indenture could constitute an event of default under any such agreement. If the payment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay such indebtedness and repurchase the Notes or pay cash with respect to notes being converted or at maturity of the Notes.

Provisions in the Indenture for the Notes may deter or prevent a business combination that may be favorable to you.

If a fundamental change occurs prior to the maturity date of the Notes, holders of the Notes will have the right, at their option, to require us to repurchase all or a portion of their Notes. In addition, if a make-whole fundamental change occurs prior to the maturity date of the Notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its Notes in connection with such make-whole fundamental change in the manner specified in the Indenture. Furthermore, the Indenture will prohibit us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the Notes. These and other provisions in the Indenture could deter or prevent a third party from acquiring us even when the acquisition may be favorable to you.

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 September 30, 2020 and September 30, 2021, the trading price of our Class A common stock ranged from a low of \$7.35 per share to a high of \$12.32 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 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 including in response to the COVID-19 pandemic, continuing containment efforts and initiatives taken to support global economies and workers. 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 in the past. 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 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, which will expire in April 2022, 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.

The capped call transactions may affect the price our Class A common stock.

In connection with the issuance of the Notes, we entered into privately negotiated capped call transactions with certain financial institutions as counterparties. The capped call transactions initially cover, subject to customary adjustments, the number of shares of our Class A common stock initially underlying the Notes. The capped call transactions are expected to offset the potential dilution and/or offset any cash payments we make in excess of the aggregate principal amount of converted Notes, as the case may be, as a result of conversion of the Notes.

From time to time, the counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our Class A common stock and/or purchasing or selling our Class A common stock or other securities of ours in secondary market transactions prior to the maturity of the Notes (and are likely to do so during any observation period related to a conversion of the Notes). This activity could also cause or prevent an increase or a decrease in the market price of our Class A common stock.

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 App Annie, comScore, and Sensor Tower publish daily data about us and other social game companies with respect to downloads, 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.

While we have not experienced any material impact to our internal controls over financial reporting despite the fact that most of our employees are working remotely due to the COVID-19 pandemic, if we are unable to maintain adequate internal controls for financial reporting in the future due to the COVID-19 pandemic or any other reason, 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 our Board members 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**

None

Issuer Purchases of Equity Securities

The following table represents our stock repurchase activity during the third quarter of 2021:

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)
July 1 - July 31, 2021	—	\$ —	—	\$ 173,847,972
August 1 - August 31, 2021	—	\$ —	—	\$ 173,847,972
September 1 - September 30, 2021	—	\$ —	—	\$ 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. The 2018 Share Repurchase Program is authorized to remain in effect until April 2022.

ITEM 6. EXHIBITS

Exhibit No.	Description of Exhibit	Incorporated by Reference				Filed or Furnished Herewith
		Form	File No.	Exhibit	Filing Date	
2.1†	Master Business Transfer Agreement, dated as of August 3, 2021, by and among the Registrant, Beijing Fotoable Technology Limited, Funjoy Technology Limited, Beijing Guoren Interactive Technology Co., Ltd., Shanghai Xianke Guanchen Management Center, Shanghai Lanfeng Tuoyuan Management Center (Limited Partnership), Lvy Technology Limited and Beijing StarLark Technology Co., Ltd. (incorporated by reference to Exhibit 2.1 of the registrant's Current Report on Form 8-K (File Number 001-35375) filed on August 5, 2021)	8-K	001-35375	2.1	October 5, 2021	
10.1+	Appointment Letter between Zynga Inc. and Amy Rawlings	10-Q	001-35375	10.2	August 6, 2021	
10.2+	Chartboost, Inc. 2012 Stock Plan and Form of Agreement	S-8	333-258591	99.1	August 6, 2021	
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	Inline XBRL Instance Document - the instance document does not appear in the interactive data file because its XBRL tags are embedded within the Inline XBRL document					
101.SCH	Inline XBRL Taxonomy Extension Schema Document					
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					
101.LAB	Inline XBRL Taxonomy Extension Labels Linkbase Document					
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					
104	Cover page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					

+ Indicates management contract or compensatory plan.

† Certain portions of this exhibit have been omitted pursuant to Items 601(a)(5) and 601(b)(2) of Regulation S-K. A copy of any omitted portion will be furnished supplementally to the Securities and Exchange Commission upon request; provided, however, that Zynga may request confidential treatment pursuant to Rule 24b-2 of the Exchange Act for any document so furnished.

• 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 November 8, 2021.

ZYNGA INC.

By: /s/ Frank Gibeau

Frank Gibeau

Chief Executive Officer

(On behalf of Registrant)

By: /s/ James Gerard Griffin

James Gerard Griffin

Chief Financial Officer

(On behalf of Registrant)

By: /s/ Amy M. Rawlings

Amy M. Rawlings

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 James 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 September 30, 2021 (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 8th day of November, 2021.

/s/ Frank Gibeau

Frank Gibeau

Chief Executive Officer

/s/ James Gerard Griffin

James 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."