

GLU MOBILE INC  
Form 10-K  
March 10, 2017  
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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark One)

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

For the fiscal year ended December 31, 2016

OR

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

Commission file number: 001-33368

Glu Mobile Inc.

(Exact name of registrant as specified in its charter)

Delaware  
(State or Other Jurisdiction of  
Incorporation or Organization)

91-2143667  
(IRS Employer  
Identification No.)

500 Howard Street, Suite 300  
San Francisco, California  
(Address of Principal Executive Offices)

94105  
(Zip Code)

(415) 800-6100

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(Registrant's Telephone Number, Including Area Code)

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value \$0.0001 per share	NASDAQ Global Market

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

None

(Title of Class)

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 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 and post such files). Yes ☐ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting

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company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of June 30, 2016, the last business day of the registrant’s most recently completed second fiscal quarter, based upon the closing price of such stock on such date as reported by The NASDAQ Global Market, was approximately \$206,369,770. Shares of common stock held by each executive officer and director of the registrant and by each person who owns 10% or more of the registrant’s outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

The number of outstanding shares of the registrant’s common stock as of February 28, 2017 was 134,716,760.

#### DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement for registrant’s 2016 Annual Meeting of Stockholders to be filed pursuant to Regulation 14A within 120 days after registrant’s fiscal year ended December 31, 2016 are incorporated by reference into Part III of this Annual Report on Form 10-K.

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### Forward-Looking Statements

The information in this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Such statements are based upon current expectations that involve risks and uncertainties. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. For example, words such as “may,” “will,” “should,” “estimates,” “predicts,” “potential,” “continue,” “strategy,” “believes,” “anticipates,” “plans,” “expects,” “intends” and similar expressions are intended to identify forward-looking statements. Our actual results and the timing of certain events may differ significantly from the results discussed in the forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to, those discussed elsewhere in this report, particularly in the section titled “Risk Factors,” and the risks discussed in our other Securities and Exchange Commission, or SEC, filings. We undertake no obligation to update the forward-looking statements after the date of this report, except as required by law.

## PART I

### Item 1. Business

#### General

Glu Mobile develops, publishes and markets a portfolio of free-to-play mobile games designed to appeal to a broad cross section of users who download and make purchases within our games through direct-to-consumer digital storefronts, such as the Apple App Store, Google Play Store, Amazon Appstore and others. Free-to-play games are games that a player can download and play for free, but which allow players to access a variety of additional content and features for a fee and to engage with various advertisements and offers that generate revenue for us. We have a portfolio of compelling games based on our own intellectual property such as Contract Killer, Cooking Dash, Covet Fashion, Deer Hunter, Design Home, QuizUp, Racing Rivals, and Tap Sports Baseball, as well as games based on third party licensed brands including Gordon Ramsay DASH, Kendall & Kylie, and Kim Kardashian: Hollywood. We are headquartered in San Francisco, California, with U.S. offices in California in the cities of Burlingame, San Mateo, and Long Beach and in Portland, Oregon, and international locations in Canada, China, India, Japan, and Russia.

We were incorporated in Nevada in May 2001 as Cyent Studios, Inc. and changed our name to Sorrent, Inc. later that year. In November 2001, we incorporated a wholly owned subsidiary in California, and, in December 2001, we merged the Nevada corporation into this California subsidiary to form Sorrent, Inc., a California corporation. In May

2005, we changed our name to Glu Mobile Inc. In March 2007, we completed our initial public offering and our common stock is traded on the NASDAQ Global Market under the symbol “GLUU.” Except where the context requires otherwise, in this Annual Report on Form 10-K, references to “Company,” “Glu,” “Glu Mobile,” “we,” “us” and “our” refer to Glu Mobile Inc., and where appropriate, its subsidiaries.

#### Available Information

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy statements and other reports, and amendments to these reports, required of public companies with the SEC. The public can read and copy the materials we file with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549 and can obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website at [www.sec.gov](http://www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. We make available free of charge on the Investor Relations section of our corporate website all of the reports we file with the SEC as soon as reasonably practicable after they are filed. Our internet website is located at [www.glu.com](http://www.glu.com) and our Investor Relations website is located at [www.glu.com/investors](http://www.glu.com/investors). The information on our website is not incorporated into this report, unless otherwise expressly stated. Copies of our Annual Report on Form 10-K for the year ended December 31, 2016 may also be obtained, without charge, by contacting Investor Relations, Glu Mobile Inc., 500 Howard Street, Suite 300, San Francisco, California 94105 or by emailing [IR@glu.com](mailto:IR@glu.com).

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### Strategy and Business Developments

#### Our Strategy

Our goal is to become the leading developer and publisher of free-to-play mobile games. Our strategy for achieving this goal is comprised of three parts:

- Building Blue Ocean Platforms;
- Attracting and Fostering Creative Leaders; and
- Cultivating Highly Creative Environments.

#### Building Blue Ocean Platforms

The first prong of our strategy is to build blue ocean platforms for smartphones and tablets. Platforms are titles that we continue to update with additional content and features and which grow revenue year over year. We believe a key component of driving revenue growth year over year from a platform title is the inclusion of community features which may involve users competing with each other, forming clubs or groups to cooperate in completing goals or events, or contributing their own original content to the game. Covet Fashion, Design Home and Tap Sports Baseball are examples of our existing titles that are, or have the potential to be, platforms. We are focused on building platforms in what we refer to as “blue oceans,” meaning that we seek to identify genres that are not oversaturated with competitive titles and where we believe we can become the leader in that genre. We currently publish titles in five genres: fashion and celebrity, sports and action, food, home and social networking. We believe these are genres in which we have already established a leadership position, are otherwise aligned with our strengths or are conducive to the establishment of a strong platform.

In addition, we have also focused our efforts on turning our existing games with a significant daily active user base into what we call evergreen titles. Evergreen titles are similar to platforms in that we continue to update them with additional content and features, but differ from platforms in that our focus is to reduce and potentially reverse their year over year revenue declines; to the extent that we succeed in our efforts to grow annual revenue from an evergreen title, we would then consider such evergreen title to be a platform. Cooking Dash 2016, Deer Hunter 2017, Gordon Ramsay DASH, Kim Kardashian: Hollywood, and Racing Rivals are examples of our existing evergreen titles.

While we have generally designed our games to incorporate social features that enhance the user’s gameplay experience, as part of our platform strategy we have further prioritized adding new social and community-based features, systems, and modes into our platform and evergreen titles. For example, Covet Fashion allows users to join “Fashion Houses” with other users and then borrow each others’ clothes, receive advice on their looks, chat and work together to unlock additional rewards in special style challenges, Racing Rivals enables players across Apple’s iOS and Google’s Android platforms to compete against each other in real-time, synchronous racing, and our Tap Sports Baseball titles allow players to challenge their friends to head-to-head matchups. We intend to continue to innovate to further enable our titles’ ability to function as successful platforms or evergreen titles. Many of our games also leverage technologies such as Apple’s Game Center or Facebook Connect, which enables players to compare their high scores and achievements with their friends and against the global leaderboard.

Another prong of our platform strategy is the inclusion and utilization of key brands and celebrity licensors within our titles. For example, we have worked with our celebrity licensors to engage their social media audiences and build games that will resonate with their unique fan bases. In particular, Kim Kardashian: Hollywood utilizes transmedia storytelling, leveraging Ms. Kardashian West's built-in social media fan base to drive installs and awareness of the game, and then attempts to surprise and delight those fans with real-world events and other game content based on her life. Our Gordon Ramsay DASH title utilizes Gordon Ramsay's personality to guide users to become a restaurateur in the image of Mr. Ramsay. Our goal is for the game content to become entwined with the celebrity's persona and social media presence, and to otherwise enhance interaction with the celebrity's fans. We believe that we can continue to drive installs and



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awareness of our games through our licensing efforts with celebrities, social influencers, organizations and brands that resonate with potential players of our games. In 2017, the latest offering in our Tap Sports Baseball franchise will feature licensed content from Major League Baseball, or MLB, for the first time, together with current and former MLB players pursuant to our continuing agreements with the Major League Baseball Players Association, or MLBPA, and Major League Baseball Players Alumni Association, or MLBPAA. Partnering with desirable licensing partners and renewing our existing licenses requires that we continue to develop successful games based on licensed content and are able to compete with other mobile gaming companies on financial and other terms in signing such partners. We also plan to continue introducing third-party licensed brands, properties and personalities into our games as additional licensed content, for cameo appearances or for limited time events in order to drive awareness and monetization.

We also plan to continue monitoring the successful aspects of our games to drive downloads and enhance monetization and retention as part of our platform strategy, whether by optimizing advertising revenue within each title, securing additional compelling licensing arrangements, building enhanced and more complex core gameplay, adding additional social features, tournaments and events or otherwise.

### Creative Leaders

The second prong of our strategy is to attract, cultivate and retain proven creative leaders who will develop and update our platform and evergreen titles and also work to prototype new ideas that have the potential to become platforms prior to committing larger investments in terms of headcount and resources. Each creative leader is responsible for the long-term planning of his or her platform and evergreen titles and to identify and invest in long-term opportunities and concepts that have the potential to become top grossing hit titles. We have made, and plan to make, significant investment in our creative leaders. Our talent model is to attract the industry's finest and provide them with world-class infrastructure, tools, funding and the support to create innovative and polished games. In 2016 and early 2017 we made the following key hires as part of our creative leader strategy, and intend to make additional creative leader hires in 2017:

- in July 2016, we hired former Vice President and Chief Operating Officer of EA Mobile, Mark van Ryswyk, as our Senior Vice President of Global Studios. Mr. van Ryswyk has more than 15 years of gaming experience and expertise and currently manages our Crowdstar Inc., or Crowdstar, studio that we acquired in November 2016; and
- in January 2017, we hired Mike Olsen as Senior Vice President of Studios. Mr. Olsen served in various roles during his 20 years at Electronic Arts where he led the design and creative direction for 25 titles including Star Wars: Galaxy of Heroes, The Godfather, Tiger Woods PGA Tour Golf, NCAA March Madness, NCAA Football and more. Mr. Olsen brings to us an extensive background in creative direction, game design, studio management and live game operations.

### Highly Creative Environments

We believe a key part of building platforms and attracting and cultivating creative leaders is providing them with highly creative environments that are optimal for creating hit games. We intend to build out studios that enable small teams to rapidly prototype a game concept and then move on to developing a game or to building another prototype. Creative environments that support our creative leaders and other game development personnel are also needed to attract the level of talent that will support our growing platforms and build new platforms. During 2017, we intend to consolidate our teams to fewer locations, including a new larger headquarters in San Francisco. Our goal is to create a state-of-the-art facility in San Francisco that is optimal for the creation of innovative designs and successful platform and evergreen games.

## Business Developments

Since January 1, 2016, we have taken the following actions to support our business:

- We continued to focus our efforts on developing and publishing games for smartphones and tablet devices.

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Our significant achievements related to these efforts include the following:

- In December 2016, we had approximately 4.4 million daily active users and 35.9 million monthly active users of our games on our primary distribution platforms, including Apple's App Store, the Google Play Store, Amazon's Appstore, Facebook, and the Mac App Store.
- As of December 31, 2016, we had approximately 1.5 billion cumulative installs of our games on our primary distribution platforms, including approximately 60.4 million installs during the fourth quarter of 2016.
- We globally released seven free-to-play games that we developed during 2016, including three titles that we consider to be platform or evergreen titles – Design Home, Gordon Ramsay DASH and Tap Sports Baseball 2016.
- In December 2016, we completed the acquisition of Crowdstar, a leading developer of fashion and décor home games. Crowdstar's portfolio includes platform title, Covet Fashion, and the recently launched Design Home title. We intend to leverage their successful platforms as part of our platform strategy and learn from their historical success.
- In December 2016, we acquired substantially all of the intangible assets and certain other assets of Plain Vanilla Corp., or Plain Vanilla, including their existing trivia-based title, QuizUp. We have transitioned daily operations and development of QuizUp to our Hyderabad, India location and believe QuizUp has the potential to become a platform title.
- We partnered with MLB to incorporate its brands and properties into our forthcoming title MLB Tap Sports Baseball 2017. MLB Tap Sports Baseball 2017 will also include current and former MLB players pursuant to our continuing agreements with the MLBPA and MLBPA, including featuring current National League Most Valuable Player Kris Bryant.
- In February 2016, we announced that we had partnered with award-winning artist, Taylor Swift, on the development of a new mobile game. We expect to release our Taylor Swift title during 2017 and believe it has the potential to be a platform title.
- We successfully transitioned our Chief Executive Officer role, as our former President and Chief Executive Officer, Niccolo de Masi, became our Executive Chairman in November 2016, and our former President of Global Studios, Nick Earl, was appointed President and Chief Executive Officer in November 2016 and joined our Board of Directors in December 2016.
- In January 2017, we began transitioning the maintenance and daily operations of Racing Rivals to Carbonated Inc., or Carbonated, a mobile game studio managed by game industry veteran Travis Boatman, as part of our efforts to consolidate our studio locations and increase revenue from this title.

Across the globe our industry is experiencing a trend where hit titles generally remain higher in the top grossing charts for longer. We believe this is due to the continued specialization and investment of teams and companies in their hit titles, and the live, social nature of certain games. Our strategy and the measures we have implemented during the past year to support our business position us to take advantage of these trends. We plan to focus on regularly updating and otherwise supporting our platform and evergreen titles in order to ensure that those games monetize and retain users for even longer periods of time. In addition, we plan to continue to invest in our creative leaders and the creative environments in which they and their teams work to increase our likelihood of creating significant hit platform titles in 2017 and beyond.

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### Our Products

We develop and publish a portfolio of mobile games designed to appeal to a broad cross section of the users of smartphones and tablet devices. Our portfolio of mobile games is spread across the following genres:

- Fashion and Celebrity
  - o Covet Fashion, which we acquired as part of our acquisition of Crowdstar, is a top grossing fashion title that has grown annual revenue each year since its launch in 2013. Covet Fashion features continually changing content and daily events to help drive engagement and monetization of its users.
  - o We released Kim Kardashian: Hollywood in June 2014 and it continues to be one of our top five revenue-generating titles on an annual basis, demonstrating its continuing strength as an evergreen title. This title remained a top 200 grossing game on the Apple App Store's U.S. iPhone games rankings throughout 2016 on a monthly basis.
- Food
  - o Cooking Dash 2016, launched in June 2015, continued to be one of our top revenue-generating titles for 2016. We intend to release a significant update to this title during 2017 and believe that we have the potential to increase revenue from this title and for it to become a platform.
  - o Gordon Ramsay DASH, launched in June 2016, continued the success of Cooking Dash 2016 while increasing user retention and average revenue per daily active user. We intend to release a significant update to this title during 2017 and believe that we have the potential to increase revenue from this title and for it to become a platform.
- Sports and Action
  - o Tap Sports Baseball 2016, launched in March 2016, was the third installment in our popular Tap Sports Baseball franchise in which we partnered with the MLBPA and MLBPAA to include real-world baseball stars from each of the MLB's 30 teams. Tap Sports Baseball 2016 was the highest ranked baseball title in the Apple App Store's U.S. iPhone top grossing games rankings during 2016.
  - o Deer Hunter 2016, launched in September 2015, which we recently rebranded Deer Hunter 2017, remained one of our top action titles during 2016. We recently released two major updates to this title, one which added hunting dogs and the other which added an underwater hunting feature, which updates have helped increase revenue from this title. We believe that this is a good example of our ability to increase revenue from our evergreen titles and intend to apply these learnings to other titles.
  - o Our Racing Rivals game, originally released in the summer of 2013, was one of our top revenue-generating titles for 2016 and remained one of the highest ranked racing titles in the Apple App Store's U.S. iPhone top grossing games rankings during 2016. In January 2017, we began transitioning the maintenance and daily operations of Racing Rivals to Carbonated and believe that Carbonated has the potential to increase revenue from this title during 2017.
- Social Networking
  - o QuizUp, released in 2013 by Plain Vanilla and acquired by us in December 2016, is a multiplayer trivia game where users can challenge friends to trivia games and create their own trivia competitions. It is one of the titles we believe has the potential to become a platform that generates growing and consistent revenue.
- Home
  - o Design Home, launched in November 2016, was built on the Covet Fashion engine and we believe has the opportunity to become a successful platform title. It peaked at #28 on the Apple App Store's U.S. iPhone top grossing games rankings during 2016 and remains the top home design game in the Apple App Store.

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The table below sets forth the title, release date, and genre for each of the games we developed and launched worldwide in 2016:

Title	Release Date	Genre
Kendall & Kylie	February 2016	Fashion and Celebrity
Tap Sports Baseball 2016	April 2016	Action & Sports
Britney Spears: American Dream	May 2016	Fashion and Celebrity
Gordon Ramsay DASH	June 2016	Food
Rival Fire	July 2016	Action and Sports
Design Home	November 2016	Home
Nicki Minaj: The Empire	December 2016	Fashion and Celebrity

As part of our platform strategy, we plan to release fewer games in 2017 as compared to prior years and plan to focus our efforts on developing titles that have the potential to become platforms. During 2017, we plan to release:

- a title featuring singer and songwriter Taylor Swift, which will be a departure from our previous celebrity titles and instead will be an innovative and novel platform for users and fans of Taylor Swift; and
- MLB Tap Sports Baseball 2017, an update of Tap Sports Baseball 2016, which will feature current and former MLB players, as well as MLB clubs and uniforms, through partnerships with the MLB, MLBPA and MLBPA and will incorporate platform features such as allowing users to form clans or clubs with other users and advance their progression through their clans.

We may release additional titles during 2017 depending on their performance during beta testing.

We work to ensure that our games have consistently high production values, are visually appealing and have engaging core gameplay. These characteristics have typically helped to drive installs and awareness of our games and resulted in highly positive consumer reviews.

We continued to improve monetization in our games, with our most popular games remaining successful for longer periods of time. The longevity of our most successful games derives from strong core gameplay, regular content updates and social and community features, such as tournaments, player-versus-player gameplay and live events.

Our games historically have had “thick clients” due to their high production values and, in some cases, 3-D graphics. A thick client game means that our games have a large file size, often 100 megabytes or more, that resides on the player’s device. Because of the inherent limitations of the digital platforms and telecommunications networks, which, at best, only allow applications that are less than 100 megabytes to be downloaded over a carrier’s wireless network, users generally must download one of our games either via a wireless Internet (wifi) connection or initially to their computer and then load the game to their device.

## Our Revenue

We generate the majority of our revenue through “in-app-purchases,” with the balance of our revenue generated by offers and in-game advertising. For certain of our games in which we incorporate licensed content, we share a portion of our revenue with the licensors featured in these titles.

## In-App Purchases

Although users can download and play our free-to-play games free of charge, they can purchase virtual currency or virtual items to enhance their gameplay experience – we refer to these as “in-app purchases” or “micro-transactions.” Some of the benefits that players receive from their in-app purchases include:

- Play Longer Through Better Equipment – We generally design our games to become significantly more

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challenging as the player advances through the game. For a game like Cooking Dash 2016, players can purchase higher-quality ingredients and various boosts that can help them complete increasingly difficult levels more easily.

- Play Longer Through Energy Replenishment – We design some of our games, such as Deer Hunter 2017 and Kim Kardashian: Hollywood, to have short playing sessions, the duration of which are limited by the energy available for each session. Players of Deer Hunter 2017 and Kim Kardashian: Hollywood can use their virtual currency to purchase items that will replenish their energy and enable them to extend their gameplay session.
- Accelerate Game Progress – Although some players are content to slowly “grind” their way through progressing in a game, others are willing to purchase items to accelerate their progression. For example, our Tap Sports Baseball titles enable players to spend their virtual currency to upgrade their roster of players and boost the effectiveness of such players, thus allowing the player to more quickly assemble a winning team.
- Customization – Our games generally enable players to express themselves by customizing their character, the world the character inhabits or a room. For example, Covet Fashion and Design Home each allow users to customize the look of their avatar or room, respectively, by purchasing clothing or home design elements. While in Covet Fashion users own a clothing or accessory item indefinitely after it is purchased and can use it in multiple events, Design Home limits the player to five uses of any purchased design element.

We sell virtual currency to consumers at various prices ranging from \$0.99 to \$99.99 (adjusted for local currencies for sales to players in foreign countries), which is consistent with storefront pricing guidelines, with the significant majority of player purchases occurring at the lower price points. The digital storefronts generally share with us 70% of the consumers’ payments for in-app purchases, although these rates are generally lower for Android-based platforms in China; we do not have any special agreement or arrangement with respect to pricing or terms with any of the digital storefronts. Consumers may also acquire virtual currency and other virtual items through gameplay or by completing offers, as described below.

## Offers and In-Game Advertising

In addition to in-app purchases of virtual currency, we also monetize our games through offers and in-game advertising. Optimizing advertising revenue within our games requires us to continue taking advantage of positive trends in the mobile advertising space, particularly as brands continue to migrate budgets from web to mobile. Offers enable users to acquire virtual currency without paying cash but by instead taking specified actions, such as downloading another application, watching a short video, subscribing to a service or completing a survey. We work with third parties to provide these offers to players of our free-to-play games, and we receive a payment from the third party offer provider based on consumer response to these offers. We also work with third party advertising aggregators who embed advertising, such as ads appearing within the game between content transitions and as pop-up ads; the aggregators typically pay us based on the number of impressions, which is the number of times an advertisement is shown to a player. In addition, from time to time we work directly with other application developers to include advertising for their applications in our games, and the developers pay us based on either the number of impressions in our games or the number of users who download the developer’s application. We have also begun to include virtual product integrations of goods directly into certain of our celebrity titles such as Kim Kardashian: Hollywood and expect that we may generate increasing advertising revenue from these types of product integrations in the future.

## Licensed Content

Following the success of Kim Kardashian: Hollywood and games incorporating licensed third-party brands and properties, like Racing Rivals and our Tap Sports Baseball 2016 titles, we increased our licensing efforts, both in terms of securing licenses to develop games based upon or significantly featuring specific licensed third-party intellectual property and for cameo appearances or to otherwise incorporate third-party intellectual property into our games. In 2016, 2015, and 2014, games based on our own intellectual property accounted for approximately 39.7%, 42.1%, and 62.7% of our revenue, respectively. The decrease from 2015 to 2016 was due to a higher percentage of our revenue being generated



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from titles that include third-party licensed brands, properties or other content, such as Kim Kardashian: Hollywood, Kendall & Kylie, Gordon Ramsay DASH, Tap Sports Baseball 2016 and Racing Rivals, and lower revenue from our titles based on our own intellectual property. The decrease from 2014 to 2015 was due to higher revenue from our Kim Kardashian: Hollywood and Racing Rivals titles, and lower revenue from certain of our titles based on our own intellectual property, including Deer Hunter, Dino Hunter: Deadly Shores and Frontline Commando. We expect that most, if not all, of our new titles launched in 2017 will include third-party licensed brands, properties or other content.

For games based on or significantly incorporating licensed brands, properties or other content, we share a portion of our revenue with the respective licensors. The average royalty rate that we paid on games based on licensed content (such as Kim Kardashian: Hollywood, Gordon Ramsay DASH and Kendall & Kylie) or significantly incorporating licensed content (such as Racing Rivals and Tap Sports Baseball 2016) was approximately 21.9% in 2016, 21.9% in 2015, and 21.3% in 2014 of gross revenue. However, the individual royalty rates that we pay can be significantly above or below the average based on a variety of factors, such as the strength of the licensed brand, our development and porting obligations, and the platforms for which we are permitted to distribute the licensed content. Additionally, the individual royalty rate for our platform titles may increase in 2017 with the inclusion of additional licensed properties, such as we expect with our title featuring Taylor Swift and MLB Tap Sports Baseball 2017, due to the addition of licensed content from the MLB.

## Sales, Marketing and Distribution

We market, sell and distribute our games primarily through direct-to-consumer digital storefronts, such as Apple's App Store, the Google Play Store and Amazon's Appstore. In addition to publishing our smartphone games on direct-to-consumer digital storefronts, we also publish some of our titles on other platforms, such as the Mac App Store and Facebook. The significant majority of our smartphone revenue has historically been derived from Apple's iOS platform, which accounted for approximately 62.4%, 60.5%, and 61.8% of our total revenue in 2016, 2015 and 2014, respectively. We generated the majority of these iOS-related revenue from the Apple App Store, which represented 52.7%, 51.7%, and 52.2% of our total revenue in 2016, 2015 and 2014, respectively, with the significant majority of such revenue derived from in-app purchases. We generated the balance of our iOS-related revenue from offers and advertisements in games distributed on the Apple App Store and, to a far lesser extent, sales of premium games. In addition, we generated approximately 36.1%, 38.1%, and 35.4% of our total revenue in 2016, 2015 and 2014, respectively, from the Android platform. We generated the majority of our Android-related revenue from in-app purchases and sales of premium games made through the Google Play Store, which represented 27.6%, 27.4%, and 24.8% of our total revenue in 2016, 2015 and 2014, respectively. No other customer or digital storefront accounted for more than 10% of our total revenue in 2016, 2015 or 2014.

Because of the fragmentation inherent in the Android platform, we need to "port" – or convert into separate versions – our games for a significant percentage of the thousands of Android-based devices that are currently commercially available, many of which have different technical requirements. Since the number and variety of Android-based smartphones and tablets shipped worldwide continues to grow, we must maintain and enhance our porting capabilities, which require, and will likely continue to require, us to invest considerable resources in this area.

As part of our efforts to successfully market our games on the direct-to-consumer digital storefronts, we attempt to educate the storefront owners about our title roadmap and seek to have our games featured or otherwise prominently placed within the storefront. We believe that the featuring or prominent placement of our games facilitates organic user discovery and is likely to result in our games achieving a greater degree of commercial success. We believe that a number of factors may influence the featuring or placement of a game, including:

- the perceived attractiveness of the title or brand;
- the quality of the game;
- the level of critical or commercial success of the game or of other games previously introduced by a publisher;

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- incorporation of the storefront owner's latest technology in the publisher's title;
- how strong the consumer experience is on all of the devices that discover titles using any given digital storefront;
- the publisher's relationship with the applicable storefront owner and future pipeline of quality titles for it; and
- the current market share of the publisher.

The majority of our games have been featured on the Apple and Google storefronts when they were commercially released, which we believe is in part due to our efforts to be a consistently good partner with Apple and Google. In addition to our efforts to secure prominent featuring or placement for our games, we have also undertaken a number of marketing initiatives designed to acquire players and increase downloads of our games and increase sales of virtual currency, including:

- using social networking websites, such as Facebook and Twitter, to build a base of fans and followers to whom we can quickly and easily provide information about our games;
  - paying third parties, including advertising networks, social media channels and social influencers, to advertise or incentivize consumers to download our games through offers or recommendations;
- using "push" notifications to alert users of sales on virtual currency or items in our games;
- cross-promoting our games through banner advertisements in our other games, as well as advertising our games in our competitors' games;
- having our celebrity partners market their games to their fans through their social media channels; and
- undertaking extensive outreach efforts with video game websites and related media outlets, such as providing reviewers with access to our games prior to launch.

In addition, certain of our games featuring celebrities or other licensed content like Kim Kardashian: Hollywood generate significant attention through word of mouth, particularly through social media channels. We look to leverage existing social media presences in order to increase the virality and commercial success of our games. In addition, in games like Racing Rivals, we are able to build and maintain a highly engaged community of players around the title. Social-based methods for promoting our games include in-game events where players compete with and against each other, in-game social promotions and regular content updates, including in-game content that leverages real world events, such as holiday promotions or current events in the life of our celebrity partners.

We have also made significant investments in our proprietary analytics and in the development and implementation of various monetization techniques in our titles. With our enhanced analytics capabilities, we intend to devote resources towards segmenting and learning more about the players of each of our franchises and further monetizing our highest spending and most engaged players. We aim to connect the data, insights and knowledge gained from our analytics and monetization techniques to every element of our business – from marketing to merchandising – in order to improve player retention and monetization.

## Development Studios

The internal studios that develop our games are located across the globe, including studio teams in San Francisco, Burlingame, San Mateo, and Long Beach, California; Portland, Oregon; Toronto, Canada; and Moscow,

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Russia. Our creative leaders have primary responsibility for overseeing game development for our platform and evergreen titles. In addition, as part of our restructuring activities in 2016, as well as the acquisition of the QuizUp application from Plain Vanilla in December 2016, we moved certain of our catalog titles to our Hyderabad, India and Moscow, Russia locations to run live operations and produce content updates for such games. In addition, in 2017 we started to reduce the number of studios that operate outside of the San Francisco Bay Area. As part of these efforts, in January 2017 we began to transition development and live operations of our Racing Rivals title to Carbonated while reducing headcount in our Long Beach, California studio. We believe that Carbonated has the skills and experience necessary to make Racing Rivals a platform and reverse revenue declines that were experienced by the title during 2016.

Our studios are generally supported by central services personnel in our San Francisco, California headquarters who provide expertise with respect to areas such as game design, monetization, production, user experience, data analytics and live operations, with each studio leveraging such central services to varying degrees.

Our game development process involves a significant amount of creativity, particularly with respect to developing original intellectual property franchises or games in which we license intellectual property from celebrities, Hollywood studios or other owners of brands, properties and other content. Creative and technical studio expertise is necessary to design games that appeal to players who typically play in short bursts and to develop games that work well on mobile phones and tablets with their inherent limitations, such as small screen sizes and control buttons. During 2017, we plan to hire additional creative leaders and invest in technical studio expertise to drive content and features in our platform and evergreen titles and to prototype ideas that we believe can become hit platform titles.

Despite our actions in early 2017 to reduce our geographical footprint and consolidate studios, our development personnel are located in four different countries across three continents, which results in certain inherent complexities. To address these issues, we instituted our Glu University training program. Glu University is designed to increase interaction among our studio teams, including having international studio team members regularly spend time in our U.S. studios. The goal of this program is to ensure that we increase the uniformity, quality and commercial success of our games. In addition, we believe that our strategy of focusing our development efforts on building and maintaining platform and evergreen titles in the fashion and celebrity, food, sports and action, social networking and home genres will help ensure more efficient use of our talent and resources across our studios and further promote the sharing of expertise and best practices.

## Product Development

We have developed proprietary technologies and product development processes that are designed to enable us to rapidly and cost effectively develop and publish games that meet the expectations and preferences of consumers and the needs of our distributors. These technologies and processes include:

- core development platforms;

- porting tools and processes;
- broad development capabilities;
- application hosting;
- provisioning and billing capabilities;
- localization capabilities, including supporting multiple languages and customization for specific markets, such as China;
- capabilities for integrating and configuring third-party advertising plug-ins, including for maximization of advertising revenue through placements that complement game flow;

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- networking technologies for supporting game saves, guilds, matchmaking, leaderboards, and in-game messaging; and
- merchandising, monetization tools and marketing platforms.

Since the markets for our products are characterized by rapid technological change, particularly in the technical capabilities of mobile phones and tablets, and changing end-user preferences, continuous investment is required to innovate and publish new games, regularly update our games, and modify existing games for distribution on new platforms. Our Chief Technology Officer has primary responsibility for ensuring our development studios have the technology they need to build high-quality games in a timely and efficient manner.

We have continued to utilize measures designed to ensure that we publish and launch games that have a greater likelihood of being commercially successful, while identifying earlier in the development process game concepts and designs that are unlikely to produce hits. Central technical and product oversight now comes via three mechanisms:

- A rigorous greenlight process that includes a review of complex engineering modules, detailed plans for long-term retention features and a thorough understanding of the target demographic for each game.
  - A rigorous six-gate milestone review system in which confidential feedback and voting from various executives is considered as part of the decision to allow a game to proceed in development.
- A Pixar-inspired “brain-trust” to provide critical and unbiased peer input.

In addition, we plan to continue holding detailed post-mortems for all products to review and analyze the positive and negative results from each new game launch. These are in addition to our regular Glu University training sessions where we formally share best practices and learnings amongst the leadership of all functions of our global studios.

We use third-party development tools to create many of our games, including a game development engine licensed from Unity Technologies to create most of our newest games. In addition, we rely on our own servers and third-party infrastructure to operate our games and to maintain and provide our analytics data. In particular, a significant portion of game traffic is hosted by Amazon Web Services, which provides us server redundancy by using multiple locations on various distinct power grids, and we expect to continue utilizing Amazon for a significant portion of our hosting services for the foreseeable future.

Research and development expenses were \$81.9 million, \$72.9 million, and \$64.3 million for 2016, 2015 and 2014, respectively.

### Seasonality

Many new smartphones and tablets are released in, or shortly before, the fourth calendar quarter to coincide with the holiday shopping season. Because many players download our games soon after they purchase or receive their new devices, we generally experience seasonal sales increases based on the holiday selling period. Although we believe that the majority of this holiday impact occurs during the fourth quarter, some of this seasonality also occurs for us in our first calendar quarter due to some lag between device purchases and game purchases. However, the impact of this seasonality on our operating results is significantly affected by our title release schedule. In addition, companies' advertising budgets are generally highest during the fourth quarter and decline significantly in the first quarter of the following year, which affects the revenue we derive from advertisements and offers in our games. Conversely, our marketing expenses also increase in the fourth quarter, since demand for marketing is higher during the holiday season and this increased demand drives up marketing costs.



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### Competition

Developing, distributing and selling mobile games is a highly competitive business, characterized by frequent product introductions and rapidly emerging new platforms, technologies and storefronts. For players, we compete primarily on the basis of game quality, brand and customer reviews. We also compete more generally for the time and attention of users of smartphones and tablet devices who are spending ever-increasing amounts of time on social media, messaging, and music, movie and television streaming applications. We compete for promotional and digital storefront placement based on our relationship with the digital storefront owner, historical performance, game quality, perception of sales potential, customer reviews, and relationships with celebrities and other licensors of brands and other content. For celebrities, brands and other content licensors, we compete based on royalty and other economic terms, historical financial performance of celebrity and other third-party licensed brand and property games, perceptions of development quality, porting abilities, speed of execution, distribution breadth and relationships with storefront owners. We also compete for experienced and talented employees.

We compete with a continually increasing number of companies, including Activision (the parent company of King Digital Entertainment), DeNA, Disney, Electronic Arts (EA Mobile), Gameloft, Gamevil, GREE, GungHo Online Entertainment, Netmarble, Nexon, Warner Brothers, and Zynga and many well-funded private companies, including DoubleDown, Jam City, Machine Zone, Miniclip, Niantic, Pocket Gems, Rovio, Scopely, Storm 8/Team Lava, and Supercell. In addition, we face competition from online game developers and distributors who are primarily focused on specific international markets. We could also face increased competition if those companies choose to compete more directly in the United States or the other markets that are significant to us or if large companies with significant online presences such as Apple, Google, Amazon, Facebook, Microsoft or Yahoo, choose to enter or expand in the games space or develop competing games. We also compete for downloads and time spent on mobile devices with companies that develop popular social media and messaging applications, such as Facebook (with its Facebook, Facebook Messenger, Instagram, WhatsApp and other applications), Pinterest, Reddit, Snapchat, Twitter, Vevo and YouTube, companies that develop streaming music, movie and television applications, such as Pandora, Spotify, Tidal, HBO Go, Netflix, Amazon Prime or Hulu, and with companies that create non-gaming related software applications for celebrities.

In addition, given the open nature of the development and distribution for smartphones and tablets and the relatively low barriers to entry, 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 these devices using relatively limited resources and with relatively limited start-up time or expertise. As an example of the competition that we face, it has been estimated that more than 3.0 million applications, including more than 750,000 active games, were available on Apple's U.S. App Store as of February 28, 2017. 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.

Some of our competitors and our potential competitors have one or more advantages over us, either globally or in particular geographic markets, which include:

- significantly greater financial resources;
-

greater experience with free-to-play games, building and maintaining platform or evergreen titles, and building social and community features into mobile games, as well as more effective game monetization;

- stronger brand and consumer recognition regionally or worldwide;
- the capacity to leverage their marketing expenditures across a broader portfolio of mobile and non-mobile products;
- larger installed user bases from their existing mobile games;

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- larger installed user bases from related platforms, such as console gaming or social networking websites, to which they can market and sell mobile games;
- more substantial intellectual property of their own from which they can develop games without having to pay royalties;
- lower labor and development costs and better overall economies of scale;
- greater platform-specific focus, experience and expertise; and
- broader global distribution and presence.

## Intellectual Property

Our intellectual property is an essential element of our business. We use a combination of trademark, copyright, trade secret and other intellectual property laws, confidentiality agreements and license agreements to protect our intellectual property. Our employees and independent contractors are required to sign agreements acknowledging that all inventions, trade secrets, works of authorship, developments and other processes generated by them on our behalf are our property, and assigning to us any ownership that they may claim in those works. We also vigorously defend our intellectual property. For example, in November 2014, we filed a complaint against Hothead Games, Inc., or Hothead, in the United States District Court for the Northern District of California alleging that Hothead had willfully infringed certain of our copyrights and trade dress contained in our Deer Hunter 2014 game through Hothead's release of its game, Kill Shot. On August 3, 2015, we entered into a settlement agreement with Hothead in which Hothead agreed to make payments to us, including ongoing payments and we agreed to allow Hothead to continue to publish the Kill Shot game. Despite our precautions, it may be possible for third parties to obtain and use without our consent intellectual property that we own or license. Unauthorized use of our intellectual property by third parties, including piracy, and the expenses incurred in protecting our intellectual property rights, may adversely affect our business. In addition, some of our competitors have in the past released games that are nearly identical to successful games released by their competitors in an effort to confuse the market and divert users from the competitor's game to the copycat game. To the extent that these tactics are employed with respect to any of our games, it could reduce our revenue.

Our trademarks that have been registered with the U.S. Patent and Trademark Office include Glu, Crowdstar, our 2-D 'g' character logo, our 3-D 'g' character logo and several of our game titles, including Blood & Glory, Contract Killer, Cooking Dash, Deer Hunter, Diner Dash, Eternity Warriors, Frontline Commando, Gun Bros, Heroes of Destiny, QuizUp, Racing Rivals and Tap Sports. In addition, we have trademark applications pending with the U.S. Patent and Trademark Office for other of our game titles. For certain titles we do not yet have, and do not intend to seek, trademark registration. We also own, or have applied to own, one or more registered trademarks in certain foreign countries, depending on the relevance of each brand to other markets. Registrations of both U.S. and foreign trademarks are renewable every ten years.

We have five patents issued by the U.S. Patent and Trademark Office and have seven patent applications pending. In addition, we have two international patents issued through the Patent Cooperation Treaty (PCT), which correspond to two of our five issued U.S. patents, and we have four international patent applications pending with the PCT, which

correspond to four of our seven U.S. patent applications.

We also use third-party development tools to create many of our games, including a game development engine licensed from Unity Technologies to create most of our newest games.

From time to time, we encounter disputes over rights and obligations concerning intellectual property. If we do not prevail in these disputes, we may lose some or all of our intellectual property protection, be enjoined from further sales of our games or other applications determined to infringe the rights of others, and/or be forced to pay substantial royalties to a third party, any of which would have a material adverse effect on our business, financial condition and results of operations.

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### Government Regulation

We are subject to various federal, state and international laws and regulations that affect our business, including those relating to the privacy and security of customer and employee personal information and those relating to the Internet, behavioral tracking, mobile applications, advertising and marketing activities, sweepstakes and contests, and gambling. Additional laws in all of these areas are likely to be passed in the future, which could result in significant limitations on or changes to the ways in which we can collect, use, host, store or transmit the personal information and data of our customers or employees, communicate with our customers, and deliver products and services, or may significantly increase our compliance costs. As our business expands to include new uses or collection of data that are subject to privacy or security regulations, our compliance requirements and costs will increase and we may be subject to increased regulatory scrutiny.

### Financial Information about Segments and Geographic Areas

We manage our operations and allocate resources as a single reportable segment. Financial information about our segment and geographic areas is incorporated into this section by reference to Note 12 of Notes to Consolidated Financial Statements contained in Item 8 of this report. In addition, financial information regarding our operations, assets and liabilities, including our total net revenue and net income / (loss) for the years ended December 31, 2016, 2015 and 2014 and our total assets as of December 31, 2016 and 2015, is included in our Consolidated Financial Statements contained in Item 8 of this report.

### Employees

As of December 31, 2016, we had 754 employees, of which 507 were based in the United States and Canada, 129 were based in Europe and 118 were based in Asia. Our employees in China are represented by a labor union. We have not experienced any employment-related work stoppages and consider relations with our employees to be good. We believe that our future success depends in part on our continued ability to hire, assimilate and retain qualified employees.

### Executive Officers

The following table shows Glu's executive officers as of March 1, 2017 and their areas of responsibility. Their biographies follow the table.

Name	Age	Position
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Niccolo M. de Masi	36	Executive Chairman
Nick Earl	51	President and Chief Executive Officer
Eric R. Ludwig	47	Executive Vice President, Chief Operating Officer and Chief Financial Officer
Chris Akhavan	34	Chief Revenue Officer
Tim Wilson	61	Chief Technology Officer
Scott J. Leichtner	46	Vice President, General Counsel and Corporate Secretary

Niccolo M. de Masi has served as our Executive Chairman since November 2016, President and Chief Executive Officer from January 2010 to November 2016, as one of our directors since January 2010, as interim Chairman of our board of directors from July 2014 to December 2014 and as the Chairman of our board of directors since December 2014. Mr. de Masi currently serves as the President and Chief Operating Officer of Essential, a mobile phone hardware company. Prior to joining Glu, Mr. de Masi was the Chief Executive Officer and President of Hands-On Mobile, a mobile technology company and developer and publisher of mobile entertainment, from October 2009 to December 2009, and previously served as the President of Hands-On Mobile from March 2008 to October 2009. Prior to joining Hands-On Mobile, Mr. de Masi was the Chief Executive Officer of Montermob Group PLC, a mobile entertainment company, from June 2006 to February 2007. Mr. de Masi joined Montermob in 2004 and, prior to becoming its Chief Executive Officer, held positions as its Managing Director and as its Chief Operating Officer, where he was responsible for formulating and

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implementing Monsternob's growth and product strategy. Prior to joining Monsternob, Mr. de Masi worked in a variety of corporate finance and operational roles within the technology, media and telecommunications (TMT) sector, beginning his career with JP Morgan on both the TMT debt capital markets and mergers and acquisitions teams in London. He has also worked as a physicist with Siemens Solar and within the Strategic Planning and Development divisions of Technicolor. Mr. de Masi has served as a director of Xura, Inc. since November 2015. Mr. de Masi holds an M.A. degree in Physics and an MSci. degree in Electronic Engineering—both from Cambridge University.

Nick Earl has served as our President and Chief Executive officer since November 2016 and prior to that was our President of Global Studios from November 2015 to November 2016. Before joining us, from November 2014 to September 2015, Mr. Earl served as President of Worldwide Studios at Kabam. From September 2001 to October 2014, Mr. Earl served in several management positions at Electronic Arts, including most recently as Senior Vice President & General Manager of EA Mobile. From 1999 to 2001, Mr. Earl served as VP Product Development at Eidos. From April 1993 to March 1999, Mr. Earl served as an executive producer / GM at The 3DO Company. Mr. Earl holds a B.A. in Economics from the University of California at Berkeley.

Eric R. Ludwig has served as our Chief Operating Officer since October 2014, as our Executive Vice President, Chief Financial Officer since October 2011 and as our Chief Financial Officer since August 2008. Mr. Ludwig previously held the position of Senior Vice President, Chief Financial Officer and Chief Administrative Officer from September 2010 to October 2011. Prior to becoming our Chief Financial Officer, Mr. Ludwig served as our Vice President, Finance, Interim Chief Financial Officer from May 2008 to August 2008, served as our Vice President, Finance from April 2005 to May 2008 and served as our Director of Finance from January 2005 to April 2005. In addition, Mr. Ludwig has served as our Assistant Secretary since July 2006. Prior to joining us, from January 1996 to January 2005, Mr. Ludwig held various positions at Instill Corporation, an on-demand supply chain software company, most recently as Chief Financial Officer, Vice President, Finance and Corporate Secretary. Prior to Instill, Mr. Ludwig was Corporate Controller at Camstar Systems, Inc., an enterprise manufacturing execution and quality systems software company, from May 1994 to January 1996. He also worked at Price Waterhouse L.L.P. from May 1989 to May 1994. Mr. Ludwig holds a B.S. in Commerce from Santa Clara University and is a Certified Public Accountant (inactive).

Chris Akhavan has served as our Chief Revenue Officer since May 2016. Prior to this, Mr. Akhavan served as our President of Publishing from April 2013 to May 2016. Before joining us, from January 2010 to April 2013, Mr. Akhavan served in several management positions at Tapjoy, Inc., a provider of incentivized offers, most recently as Senior Vice President, Partnerships. From April 2009 to January 2010, Mr. Akhavan was a Manager, Publisher Network at RockYou!, a social gaming company, and from October 2007 to November 2008, he served as a Strategic Partner Manager at VideoEgg (now SAY Media), an advertising inventory and platform provider. Mr. Akhavan holds a B.A. in Economics from the University of California at Santa Cruz.

Tim Wilson has served as our Chief Technology Officer since October 2015. Before joining us, from October 2012 to July 2015, Mr. Wilson served in several management positions at Electronic Arts, including as Chief Technology Officer of one of their largest studios. From January 2011 to July 2012, Mr. Wilson served as the Executive Vice

President of Strategic Relationships and later as an Advisory Board Member for Gaikai, a cloud gaming company that was acquired by Sony Computer Entertainment. Prior to that, he served in various positions at Electronic Arts from January 1995 to January 2011, including as Chief Technology Officer. Mr. Wilson holds a B.S. in both Engineering and Geology from California State University, Sacramento.

Scott J. Leichtner has served as our Vice President, General Counsel and Corporate Secretary since September 2010. Mr. Leichtner joined Glu in June 2009 as our Senior Corporate Counsel. Prior to joining us, Mr. Leichtner was a corporate attorney at Fenwick & West LLP, a law firm focused on serving technology clients, from October 1997 to May 2009. Mr. Leichtner holds an A.B. in Political Science from Duke University and a J.D. from the University of Michigan.



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### Item 1A. Risk Factors

Our business is subject to many risks and uncertainties, which may affect our future financial performance. If any of the events or circumstances described below occurs, our business and financial performance could be harmed, our actual results could differ materially from our expectations and the market value of our stock could decline. The risks and uncertainties discussed below are not the only ones we face. There may be additional risks and uncertainties not currently known to us or that we currently do not believe are material that may harm our business and financial performance. Because of the risks and uncertainties discussed below, as well as other variables affecting our operating results, past financial performance should not be considered as a reliable indicator of future performance and investors should not use historical trends to anticipate results or trends in future periods.

We have a history of net losses, may incur substantial net losses in the future and may not achieve and sustain profitability or growth in future periods.

We have incurred significant losses since inception, including a net loss of \$7.2 million in 2015 and a net loss of \$87.4 million in 2016. As of December 31, 2016, we had an accumulated deficit of \$338.7 million. While we have conducted several restructurings between December 2015 and January 2017 aimed at reducing our fixed costs and operating more efficiently, our costs may continue to rise as we implement additional initiatives designed to increase revenue, including: investing more heavily in our existing titles as part of our platform strategy; hiring additional staff in our San Francisco Bay Area and Hyderabad, India locations, including new creative leaders and their teams; developing new games with greater complexity, higher production values and deeper social features; running live operations on our games; and taking other steps to strengthen our company. We anticipate that the costs of acquiring new players and otherwise marketing our new titles will continue to rise (particularly since advertising costs in our industry have generally been rising and downloads of our games are decreasing as users spend more time on alternative software applications, such as social media, messaging, and streaming applications), and we may continue to incur significant costs to acquire rights to third party intellectual property, including incurring significant minimum guaranteed royalty payments. If our revenue does not increase at a rate sufficient to offset these additional expenses, if the launch dates for our games are delayed, if we experience unexpected significant increases in operating expenses or if we are required to take additional charges related to impairments or restructurings we will continue to incur losses. For example during the fiscal year ended December 31, 2016 we recorded a \$14.5 million royalty impairment related to the prepaid guaranteed royalty and license fee payments that we have made to an affiliate of Tencent Holdings Limited, or Tencent, related to our Rival Fire game and a \$20.2 million impairment related to certain contractual minimum guarantee payments made to certain of our celebrity licensors and other prepaid royalties. We have also taken restructuring charges in the past, including \$2.3 million during 2016 following our headcount reductions initiated in April 2016 and we expect further restructuring charges of approximately \$4.3 million to \$4.7 million in total during the first and second quarters of 2017 related to our January 2017 restructuring. Additionally, during the year ended December 31, 2016 we recorded a charge of \$2.4 million due to a decline in the fair market value of our call option for Plain Vanilla and a charge of \$1.9 million due to a decrease in the fair value of the promissory notes issued to us by Plain Vanilla. Furthermore, given the declines in overall downloads of mobile gaming applications, the marked decline in gaming applications as compared to all mobile gaming applications generally, and the significant amount of time and attention users are dedicating to social media and other non-gaming applications, increasing revenue has been, and may continue to be, challenging. This industry trend has been negatively impacting us, as the number of downloads of sequels to certain of our most successful franchises, including the launches of Deer Hunter 2016 (which we have recently rebranded Deer Hunter 2017) and Eternity Warriors 4, as well as for our more recent titles, such as Nicki Minaj: The Empire, Britney Spears: American Dream, Gordon Ramsay DASH, and Rival Fire

have downloaded at significantly lower rates as compared to predecessor versions and previous new titles.

If we fail to develop and publish new mobile games that achieve market acceptance, as well as continue to enhance our existing games, particularly our most successful games, our revenue would suffer.

Our business depends on developing and publishing mobile games that consumers will download and spend time and money playing. We must continue to invest significant resources in research and development, technology, analytics and marketing to introduce new games and continue to update our successful free-to-play games, and we often must make

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decisions about these matters well in advance of a product release to timely implement them. Our success depends, in part, on unpredictable and volatile factors beyond our control, including consumer preferences and the number of applications they are willing to download to and maintain on their devices, competing gaming and non-gaming related applications, new mobile platforms and the availability of other entertainment activities. If our games do not meet consumer expectations, or they are not brought to market in a timely and effective manner, our business, operating results and financial condition would be harmed. Historically, we have focused on developing and publishing shooters and other action games primarily directed at male audiences. However, our recent releases in this genre, which includes Deer Hunter 2017 and Rival Fire, have failed to download or monetize at the same rates as some of our legacy titles, including Deer Hunter 2014 (which we have recently rebranded Deer Hunter Classic). While our Kim Kardashian: Hollywood, Cooking Dash 2016 and Gordon Ramsay DASH titles have been commercially successful, our Katy Perry Pop, Britney Spears: American Dream and Nicki Minaj: The Empire games have not been, and meeting consumer expectations could prove more challenging for us in the future as we release additional games that are primarily targeted toward female audiences, such as our upcoming title featuring Taylor Swift. Even if our games are successfully introduced and initially adopted, a failure to continually update them with compelling content or a subsequent shift in the entertainment preferences of consumers could cause a decline in our games' popularity that could materially reduce our revenue and harm our business, operating results and financial condition, which effect would be magnified for our most successful games. It is difficult to predict when and how quickly the popularity and revenue of one of our games will decline. In particular, in connection with our platform and evergreen games strategy, we expect to commit more resources to updating, adding new features to and enhancing our existing titles as opposed to launching as many new titles as we have in prior years. However, we may not be successful in updating our existing titles in our efforts to create platform and evergreen titles, such as the case with our recent updates of Covet Fashion and Racing Rivals which were received poorly by some of our players and, in the case of Racing Rivals, resulted in decreased revenue. As a result of the life cycle of our games, our business depends on our ability to consistently and timely launch new games and updates to existing games that achieve significant popularity, and have the potential to become platforms. If, as we anticipate, we launch fewer titles in 2017 as compared to prior years, we may be less likely to launch a game that achieves significant commercial success, and if the titles we expect to launch in 2017 are not launched on time or do not meet consumer expectations, our ability to grow revenue and our financial performance will be negatively affected. For example, we experienced delays in the introduction of Rival Fire and our upcoming Taylor Swift title, which had a negative impact on our financial results during 2016. If rates of revenue decline are higher than expected in a particular quarterly period, the new games we launch fail to download and/or monetize as we anticipate, or the enhancements we make to existing titles do not result in decreased rates of revenue decline, we may not meet our expectations or the expectations of securities analysts or investors for a given quarter. In addition, our Kim Kardashian: Hollywood game benefitted significantly from awareness of the game through media coverage and social media channels, and such viral success can be difficult to predict or to repeat in the future, or as in the case of Kendall & Kylie, may not translate into the level of sustained commercial success we experienced with Kim Kardashian: Hollywood. Furthermore, we compete for the discretionary spending of consumers, who face a vast array of entertainment choices, including social media and other non-gaming related apps, games played on personal computers and consoles, television, movies, sports and the Internet. If we are unable to sustain sufficient interest in our games compared to other forms of entertainment, our business and financial results would be seriously harmed.

In addition to the market factors noted above, our ability to successfully develop games for mobile devices and their ability to achieve commercial success will depend on our ability to:

- achieve a positive return on investment from our marketing and user acquisition efforts;
- minimize launch delays and cost overruns on the development of new games;
- effectively monetize our games;

- release games compatible with an increasingly diverse set of mobile devices;
- minimize and quickly resolve bugs or outages; and
- acquire and successfully integrate high quality mobile game assets, personnel or companies.

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These and other uncertainties make it difficult to know whether we will succeed in continuing to develop successful mobile games and launch these games 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.

Successfully developing and monetizing free-to-play games is a challenging business model.

We face significant challenges in achieving our goal of become the leading developer and publisher of free-to-play mobile games. The most successful launches of free-to-play games tend to include socio-competitive gameplay, player versus player activities, regularly updated content and other complex technological and creative attributes associated with our platform and evergreen offerings. While we are working to include such features in our games through our platform and evergreen strategy, we may not successfully update our games to include these features. For example, the significant update to Racing Rivals that we released in the fourth quarter of 2016 was poorly received by players and led to a significant decline in revenue from this title. Additionally, our existing games compete with our new offerings and the offerings of our competitors, and revenue from our existing games have declined over time, a trend that we have limited experience reversing on a consistent basis. In addition, following the success of our Kim Kardashian: Hollywood game, we expanded our efforts to build the premier celebrity gaming platform and partnered with A-list celebrities to selectively collaborate on future games. In 2015 and 2016, we released Katy Perry Pop, Kendall & Kylie, Britney Spears: American Dream and Nicki Minaj: The Empire. However, these titles ultimately did not achieve the level of success we experienced with Kim Kardashian: Hollywood which has resulted in a shift in our strategy away from celebrity games that are primarily role playing games. If we are unable to create innovative games that surprise and delight our players, we may continue to experience similar results with our forthcoming title featuring Taylor Swift, our revenue could be limited, and our business and operating results would suffer. We are also focusing our efforts on making our existing successful games into platforms or evergreen titles by adding new features, modes and community-enhancing features. However, this is a strategy with which we have limited experience and have not always successfully implemented as evidenced by our recent Covet Fashion and Racing Rivals updates. If we are unable to successfully implement this strategy, or if we incur excessive expenses in this effort, our financial performance and ability to grow revenue would be negatively affected, and we may be unable to launch successful new titles due to a diversion of talent and resources to our existing platform and evergreen titles. Our efforts to develop free-to-play games, celebrity and other licensed property games, enhance our existing titles and our transition towards focusing on creating and maintaining successful platforms may prove unsuccessful or, even if successful, it may take more time than we anticipate to achieve significant revenue because, among other reasons:

- our free-to-play strategy assumes that a large number of players will download our games because they are free and that we will then be able to effectively monetize the games; however, players may not widely download our games for a variety of reasons, including
- competition for downloads not only with other mobile games but also with social media and other non-gaming related applications;
- limits on the number of mobile applications players are willing to download to and maintain on their devices;
- poor consumer reviews or other negative publicity;
- ineffective or insufficient marketing efforts;
- lack of sufficient social and community features;
  - lack of prominent storefront featuring;
- failure to reach and maintain Top Free App Store rankings;



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- the relatively large file size of some of our games, which has been exacerbated due to Apple's requirement that games released on the Apple App Store include 64-bit support; in particular, our games often utilize a significant amount of the available memory on a user's device and tend to consume additional space as players advance through our games, which may cause players to delete our games once the file size grows beyond the capacity of their devices' storage limitations; and
- the inherent limitations of the smartphone platforms and telecommunications networks, which at most only allow applications that are less than 100 megabytes to be downloaded over a carrier's wireless network; as a result, players must download our games that exceed 100 megabytes either via a wireless Internet (wifi) connection or initially to their computer and then side-load them to their device;
- even if our games are widely downloaded, we may fail to retain users or optimize the monetization of these games, such as has been the case with our Kendall & Kylie title, which may occur for a variety of reasons, including poor game design or quality, lack of socio-competitive features, gameplay issues such as game unavailability, long load times or an unexpected termination of the game due to data server or other technical issues, lack of differentiation from predecessor games or other competitive games, lack of innovative features that surprise and delight our players, differences in user demographics and purchasing power or our failure to effectively respond and adapt to changing user preferences through game updates;
- future celebrity and other licensed property games that we release may fail to resonate with consumers, may cannibalize revenue from our existing games, and may cost more to build than other titles due to the minimum guaranteed royalty payments to our celebrity licensors and due to the need to differentiate gameplay among titles featuring celebrities. It is unclear whether future celebrity-based games have the potential to generate revenue at levels similar to our Kim Kardashian: Hollywood title or whether these games can be successful at all, including that the number of social media followers for a particular celebrity may have limited impact on the financial success of a title (as occurred with our Katy Perry Pop, Britney Spears: American Dream and Nicki Minaj: The Empire titles) or the number of initial downloads may not result in significant financial success on a sustained basis (as occurred with our Kendall & Kylie title);
- we intend to continue to develop games based upon our own intellectual property, rather than celebrities or well-known licensed brands and properties, and we may encounter difficulties in generating sufficient consumer interest in and downloads of our games, particularly considering we have experienced significantly fewer downloads of recent launches of game sequels as compared to their predecessors;
- many well-funded public and private companies have released, or plan to release, free-to-play games, including games incorporating celebrities or other well-known licensed brands or properties, and this competition will make it more difficult for us to differentiate our games and derive significant revenue from them;
- we may have difficulty hiring proven creative leaders and the experienced monetization, live operations, server technology, user experience and product management personnel that we require to support our platform and evergreen gaming strategy, or may face difficulties in developing our technology platform and incorporating it into our products or developing unique gameplay;
- we will depend on the proper and continued functioning of our own servers and third-party infrastructure to operate our connected games that are delivered as a service; and
- the Federal Trade Commission, or the FTC, has indicated that it intends to review issues related to in-app purchases, particularly with respect to games that are marketed primarily to minors (for example, the FTC reached a settlement with Apple in January 2014 and with Google in September 2014 on this issue, and in April 2016, a federal court granted summary judgment in favor of the FTC finding Amazon liable for unfairly billing consumers for unauthorized in-app purchases by minors), and the FTC might issue rules significantly restricting or even prohibiting in-app purchases or name us as a defendant in a future class-action lawsuit.





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If we do not achieve a sufficient return on our investment with respect to our free-to-play business model, it will negatively affect our operating results and may require us to formulate a new business strategy.

We rely on a very small portion of our total players for nearly all of our revenue that we derive from in-app purchases.

We rely on a very small portion of our total players for nearly all of our revenue derived from in-app purchases (as opposed to advertisements and incentivized offers) and installation rates and user-growth have declined for us with many of our recent product launches. Since the launch of our first free-to-play titles in the fourth quarter of 2010, the percentage of unique paying players for our largest revenue-generating free-to-play games has typically been less than 2%, when measured as the number of unique paying users on a given day divided by the number of unique users on that day, though this percentage fluctuates, and it may be higher than 2% for some of our games during specific, relatively short time periods, such as immediately following worldwide launch or the week following content updates, marketing campaigns or certain other events. To significantly increase our revenue, we must increase the number of downloads of our games, increase the number of players who convert into paying players by making in-app purchases or enrolling in subscriptions, increase the amount that our paying players spend in our games and/or increase the length of time our players generally play our games. We might not succeed in our efforts to increase the monetization rates of our users, particularly if we do not increase the amount of social features in our games or otherwise succeed in our platform and evergreen gaming strategy. We have also encountered difficulties in retaining our players as the average monthly active users, or MAU, for our games declined 27% from 49.4 million in the fourth quarter of 2015 to 35.9 million in the fourth quarter of 2016. If we are unable to convert non-paying players into paying players, or if we are unable to retain our paying players or if the average amount of revenue that we generate from our players does not increase or declines, our business may not grow, our financial results will suffer, and our stock price may decline.

We derive the majority of our revenue from Apple's App Store and the Google Play Store, and if we are unable to maintain a good relationship with each of Apple and Google or if either of these storefronts were unavailable for any prolonged period of time, our business will suffer.

The majority of our smartphone revenue has historically been derived from Apple's iOS platform, which accounted for 62.4% of our total revenue for 2016 compared with 60.5% and 61.8% of our total revenue for 2015 and 2014, respectively. We generated the majority of this iOS-related revenue from the Apple App Store, which represented 52.7%, 51.7% and 52.2% of our total revenue 2016, 2015 and 2014, respectively, with the significant majority of such revenue derived from in-app purchases. We generated the balance of our iOS-related revenue from offers and advertisements in games distributed on the Apple App Store and, to a far lesser extent, sales of premium games. In addition, we derived approximately 36.1%, 38.1% and 35.4% of our total revenue for 2016, 2015 and 2014, respectively, from the Android platform. We generated the majority of our Android-related revenue from the Google Play Store, which represented 27.6%, 27.4% and 24.8% of our total revenue for 2016, 2015 and 2014, respectively, with the significant majority of such revenue derived from in-app purchases. We believe that we have good relationships with each of Apple and Google, which have contributed to the majority of our games released in the last several years being featured on their respective storefronts upon commercial release. If we do not continue to receive prominent featuring, users may find it more difficult to discover our games and we may not generate significant revenue from them. We may also be required to spend significantly more on marketing campaigns to generate substantial revenue on these platforms. For example, in the second half of 2016, Apple began displaying paid search advertisements for applications in the Apple App Store search results for the first time. We have purchased, and may continue to purchase, such advertising to ensure the prominence of our games in the Apple App Store which could result in our marketing expenses increasing significantly. Additionally, our efforts to advertise through search

advertisements in the Apple App Store may not be successful and may not result in additional users or monetization. In addition, currently neither Apple nor Google charge a publisher when it features one of their apps. If either Apple or Google were to charge publishers to feature an app, it could cause our marketing expenses to increase considerably. Accordingly, any change or deterioration in our relationship with Apple or Google could materially harm our business and likely cause our stock price to decline.

We also rely on the continued functioning of the Apple App Store and the Google Play Store. In the past these digital storefronts have been unavailable for short periods of time or experienced issues with their in-app purchasing functionality. For example, on March 11, 2015, the Apple App Store experienced an approximately 12-hour global

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outage, which resulted in players and potential players of our games being unable to both download our games and make in-app purchases within our games during such outage. If such events recur on a prolonged basis or other similar issues arise that impact our ability to generate revenue from these storefronts, it would have a material adverse effect on our revenue and operating results. In addition, if these storefront operators fail to provide high levels of service, our players' ability to access our games may be interrupted or players may not receive the virtual currency or goods for which they have paid, which may adversely affect our brand.

The operators of digital storefronts on which we publish our free-to-play games and the advertising channels through which we acquire some of our players in many cases have the unilateral ability to change and interpret the terms of our and others' contracts with them.

We distribute our free-to-play games through direct-to-consumer digital storefronts, for which the distribution terms and conditions are often "click through" agreements that we are not able to negotiate with the storefront operator. For example, we are subject to each of Apple's and Google's standard click-through terms and conditions for application developers, which govern the promotion, distribution and operation of apps, including our games, on their storefronts. Each of Apple and Google can unilaterally change its standard terms and conditions with no prior notice to us. In addition, the agreement terms can be vague and subject to changing interpretations by the storefront operator. Further, these storefront operators typically have the right to prohibit a developer from distributing its applications on its storefront if the developer violates its standard terms and conditions. For example, in the second quarter of 2011, Apple began prohibiting virtual currency-incented advertising offers in games that directed users to download other applications from the Apple App Store in order to complete the offer. These offers accounted for approximately one-third of our smartphone revenue during the three months ended June 30, 2011, and our inability to subsequently use such offers negatively impacted our smartphone revenue thereafter. In addition, Apple informed us early in the fourth quarter of 2012 that we could no longer include links to Tapjoy's HTML5 website in our games, which negatively impacted our ability to generate revenue through incented offers. Apple has implemented restrictions related to games that include guns, including changing its game rating methodology, which has resulted in all of our games that include gun violence receiving a 17+ rating, and prohibiting some depictions of guns in game icons and other storefront art; these restrictions, could potentially negatively impact the number of people playing these "shooter" games and the revenue we generate from these games. During the second quarter of 2014, there were reports that Apple was considering prohibiting some types of virtual currency-incented video advertising in games that promoted other applications available on the Apple App Store. These incented video advertisements generate a meaningful percentage of our overall revenue, and any prohibition of these advertisements would have had a negative impact on our revenue. In the fourth quarter of 2014, Apple informed developers that beginning on February 1, 2015 all new applications, and beginning June 1, 2015 all updates to existing applications, submitted to the Apple App Store must include 64-bit support. We did not previously build our games to include 64-bit support nor did the Unity development engine that we utilize to create many of our games support 64-bit development; however, we worked with Unity to ensure that we met Apple's requirement. Building our games to support 64-bit development has increased the file sizes of our games making it more difficult for players to download our games and potentially negatively impacting the number of downloads and active users of our titles, particularly for those games where we are unable to keep file sizes below 100 megabytes, which is the maximum file size that can currently be downloaded over any carrier's wireless network (requiring download over wifi networks). In addition, we believe that Apple may have made changes to its algorithms that determine the App Store's Top Free application rankings, as games currently have a more difficult time achieving and maintaining Top Free rankings than has historically been the case. The Top Free rankings are one of the primary means for consumers to discover our games, and to the extent that algorithm changes have occurred that make it more difficult for mobile games to reach and maintain Top Free spots, it would contribute to fewer installs of our games. If Apple or Google, or any other key storefront operator, determines that we or one of our key vendors are violating its standard terms and conditions, by a new interpretation or otherwise, or

prohibits us from distributing our games on its storefront, it would materially harm our business and likely cause our stock price to significantly decline.

In addition, in the first quarter of 2014, Facebook prohibited HasOffers, whose software development kit we had incorporated into our games to track advertising metrics, from participating in Facebook's mobile measurement program because Facebook asserted that HasOffers had violated its agreement with Facebook. As a result, we removed HasOffers' software development kit from our games and replaced it with software from a new vendor. While this change did not

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adversely impact our revenue or operations, any similar changes or prohibitions in the future could negatively impact our revenue or otherwise materially harm our business, and we may not receive significant or any advance warning of such changes.

Our financial results could vary significantly from quarter to quarter and are difficult to predict, which in turn could cause volatility in our stock price.

Our revenue and operating results could vary significantly from quarter to quarter due to a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis may not be meaningful. In addition, we may not be able to accurately predict our future revenue or results of operations. We base our current and future expense levels on our internal operating plans and sales forecasts, and our operating costs are to a large extent fixed. As a result, we may not be able to reduce our costs sufficiently to compensate for an unexpected shortfall in revenue, and even a small shortfall in revenue could disproportionately and adversely affect financial results for that quarter.

In addition to other risk factors discussed in this section, factors that may contribute to the variability of our quarterly results include:

- our ability to increase the number of our paying players and the amount that each paying player spends in our games;
- the popularity and monetization rates of our new games released during the quarter and the ability of games released in prior periods to sustain their popularity and monetization rates;
- the number and timing of new games released by us and our competitors, particularly those games that may represent a significant portion of revenue in a quarter, which timing can be impacted by internal development delays, shifts in product strategy and how quickly digital storefront operators review and approve our games for commercial release, a factor which may be particularly important in 2017 as we may release as few as two new titles this year;
- changes in the prominence of storefront featuring for our games and those of our competitors;
- the loss of, or changes to, one of our distribution platforms;
- changes to the Apple iOS platform or the Google Android platform that we are not able to adapt to our game offerings;
- fluctuations in the size and rate of growth of overall consumer demand for smartphones, tablets, games and related content;
- the amount and timing of charges related to any future impairments of goodwill, intangible assets, prepaid royalties and guarantees; for example, in 2016, we impaired \$14.5 million related to prepaid royalty commitments and license fees paid to an affiliate of Tencent in connection with our Rival Fire title, \$20.2 million related to contractual minimum guarantee royalty payments made to certain celebrity licensors and other prepaid royalties, \$2.4 million related to the impairment of our call option in Plain Vanilla, and \$1.9 million related to a decline in the fair value of the promissory notes issued to us by Plain Vanilla, and in future periods we may be required to impair our goodwill due to further declines in our business and/or stock price, especially as our fair value increasingly approaches our carrying value (See Note 7 to our condensed consolidated financial statements), or take additional large impairments related to contractual minimum guarantee commitments if the associated games we are developing are not successful;

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- changes in the mix of revenue derived from games based on original intellectual property versus licensed intellectual property (including that we currently anticipate that a majority, and potentially all, of our title launches in 2017 will be based on or will significantly incorporate licensed intellectual property rather than being wholly original Glu intellectual property games);
- changes in the mix of revenue derived from in-app purchases, advertisements and offers, which mix often depends on the nature of new titles launched during the quarter;
- changes in the mix of revenue derived from first party titles and third party titles, including revenue from Racing Rivals now that we have transitioned development for this title to Carbonated;
- changes in the amount of money we spend marketing our titles in a particular quarter, including the average amount we pay to acquire each new user, as well as changes in the timing of these marketing expenses within the quarter;
- decisions by us to incur additional expenses, such as increases in research and development, restructuring expenses, or unanticipated increases in vendor-related costs, such as hosting fees;
- the timing of successful mobile device launches;
- the seasonality of our industry;
- changes in accounting rules, such as those governing recognition of revenue, including the period of time over which we recognize revenue for in-app purchases of virtual currency and goods within some of our games, as well as estimates of average playing periods and player life; and
- macro-economic fluctuations in the United States and global economies, including those that impact discretionary consumer spending.

The markets in which we operate are highly competitive, and many of our competitors have significantly greater resources than we do.

Developing, distributing and selling mobile games is a highly competitive business, characterized by frequent product introductions and rapidly emerging new platforms, technologies and storefronts. For players, we compete primarily on the basis of game quality, brand and customer reviews. We compete for space on user's smartphones and tablet devices in terms of the number of applications on their device and the amount of storage consumed by such applications. We also compete more generally for the time and attention of users of smartphones and tablet devices who are spending ever-increasing amounts of time on social media, messaging and music, movie and television streaming applications. We compete for promotional and digital storefront placement based on our relationship with the digital storefront owner, historical performance, game quality, perception of sales potential, customer reviews and relationships with celebrities and other licensors of brands and other content. For celebrities, brands and other content licensors, we compete based on royalty and other economic terms, historical financial performance of celebrity and other third-party licensed brand and property games, perceptions of development quality, porting abilities, speed of execution, distribution breadth and relationships with storefront owners. We also compete for experienced and talented employees, which competition we expect to encounter as we execute on our strategy to hire creative leaders that have proven track record of success in 2017.

We compete with a continually increasing number of companies, including Activision (the parent company of King Digital Entertainment), DeNA, Disney, Electronic Arts (EA Mobile), Gameloft, Gamevil, GREE, GungHo Online Entertainment, Netmarble, Nexon, Warner Brothers, and Zynga and many well-funded private companies, including DoubleDown, Jam City, Kabam, Machine Zone, Miniclip, Niantic, Pocket Gems, Rovio, Scopely, Storm 8/Team Lava, and Supercell. In addition, we face competition from online game developers and distributors who are primarily focused

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on specific international markets. We could also face increased competition if those companies choose to compete more directly in the United States or the other markets that are significant to us or if large companies with significant online presences such as Apple, Google, Amazon, Facebook, Microsoft or Yahoo, choose to enter or expand in the games space or develop competing games. We also compete for downloads and time spent on mobile devices with companies that develop popular social media and messaging applications, such as Facebook (with its Facebook, Facebook Messenger, Instagram, WhatsApp and other applications), Pinterest, Reddit, Snapchat, Twitter, Vevo and YouTube, companies that develop streaming music, movie and television applications, such as Pandora, Spotify, Tidal, HBO Go, Netflix, Amazon Prime and Hulu, and with companies that create non-gaming related software applications for celebrities.

In addition, given the open nature of the development and distribution for smartphones and tablets and the relatively low barriers to entry, 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 these devices using relatively limited resources and with relatively limited start-up time or expertise. As an example of the competition that we face, it has been estimated that more than 3.0 million applications, including more than 750,000 active games, were available on Apple's U.S. App Store as of February 28, 2017. 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.

Some of our competitors and our potential competitors have one or more advantages over us, either globally or in particular geographic markets, which include:

- significantly greater financial resources;
- greater experience with free-to-play games, building and maintaining platform or evergreen titles, and building social and community features into mobile games, as well as more effective game monetization;
- stronger brand and consumer recognition regionally or worldwide;
- the capacity to leverage their marketing expenditures across a broader portfolio of mobile and non-mobile products;
- larger installed user bases from their existing mobile games;
- larger installed user bases from related platforms, such as console gaming or social networking websites, to which they can market and sell mobile games;
- more substantial intellectual property of their own from which they can develop games without having to pay royalties;
- lower labor and development costs and better overall economies of scale;
- greater platform-specific focus, experience and expertise;
- broader global distribution and presence; and
- greater talent, both in overall headcount and in terms of experience in creating successful titles.

If we are unable to compete effectively or we are not as successful as our competitors in our target markets, our sales could decline, our margins could decline and we could lose market share, any of which would materially harm our business, operating results and financial condition.

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Our players may decide to select competing forms of entertainment instead of playing our games.

We also face competition for the leisure time, attention and discretionary spending of our players. Other forms of leisure time activities, such as social media and messaging applications, personal computer and console games, television, movies, sports, and the Internet, are generally much larger and more well-established options for consumers. In addition, competition for the attention of players on their mobile devices is intense, as the number of apps on mobile devices is increasing dramatically. In particular, non-gaming applications for mobile devices, such as social media and messaging, music, movie and television streaming, and dating applications, have become increasingly popular, making it more difficult for mobile games to generate the same level of consumer interest and number of downloads as in prior periods. In addition, celebrities like Kim Kardashian West, Kendall Jenner and Kylie Jenner have launched their own personal media applications, and those applications, or similar applications launched by other of our celebrity partners could compete with our titles that feature such celebrities for the time, attention and spending of our players. If our players do not find our games to be compelling or if other leisure time activities are perceived by our players to offer greater variety, affordability, interactivity and overall enjoyment, our business could be materially and adversely affected.

Securing license agreements to develop, publish and market games based on or significantly incorporating celebrities, third-party licensed brands, properties, and other content typically requires that we make minimum guaranteed royalty and other payments to such licensors, and to the extent such payments become impaired, our operating results would be harmed.

In connection with partnerships with celebrities and other licensors of third-party brands, properties and content, we have incurred and expect to continue to incur significant minimum guaranteed royalty and other payments. As of December 31, 2016 we have short-term and long-term prepaid royalty balances totaling \$43.8 million. As a result, we may incur increased levels of impairments on such payments if our forecasts for these games are lower than we anticipated at the time we entered into the agreements. For example, in 2016, we impaired \$14.5 million related to prepaid royalty commitments and license fees paid to an affiliate of Tencent in connection with our Rival Fire title and \$20.2 million related to contractual minimum guaranteed royalty payments made to certain of our celebrity licensors and other prepaid royalties. We expect that most, and potentially all, of the games we release in 2017 will be based on or otherwise incorporate celebrities and other third-party licensed brands, properties and other content as opposed to our original intellectual property games where we do not incur licensing fees and expenses. As a result, we may be required to take impairments in future periods if the games we are developing that have significant contractual minimum guarantee commitments associated with them are not successful.

If we do not successfully establish and maintain awareness of our brand and games, if we fail to develop high-quality, engaging games that are differentiated from our prior games, if we incur excessive expenses promoting and maintaining our brand or our games or if our games contain defects or objectionable content, our operating results and financial condition could be harmed.

We believe that establishing and maintaining our brand is critical to establishing a direct relationship with players who purchase our products from direct-to-consumer channels and to maintaining our existing relationships with distributors and content licensors, as well as potentially developing new such relationships. Increasing awareness of our brand and recognition of our games is particularly important in connection with our strategic focus of developing games based on our own intellectual property, games based on our celebrity partners and our other games that incorporate third party brands and properties. Our ability to promote the Glu brand and increase recognition of our



games depends on our ability to develop high-quality, engaging games, including integrating the level of social and community features appropriate for a game's target audience and partnering with celebrities and brands with fan bases that can support successful mobile games. If consumers, digital storefront owners and branded content owners do not perceive our existing games as high-quality or if we introduce new games that are not favorably received by them, then we may not succeed in building brand recognition and brand loyalty in the marketplace. In addition, globalizing and extending our brand and recognition of our games is costly and involves 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 revenue could be limited, our costs could increase and our

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business, operating results and financial condition could suffer.

In addition, if a game contains objectionable content, we could experience damage to our reputation and brand. Our games may contain violence or other content that some consumers may find objectionable. For example, Apple has assigned each of our shooter games a 17-and-older rating due to its violence. In addition, Google required us to submit two versions of our Blood & Glory and Contract Killer: Zombies games, one of which did not depict blood. Despite these ratings and precautions, consumers may be offended by some of our game content and children to whom these games are not targeted may choose to play them without parental permission nonetheless. In addition, our employees or employees of outside developers could include hidden features in our games without our knowledge, which might contain profanity, graphic violence, sexually explicit or otherwise objectionable material. If consumers believe that a game we published contains objectionable content, it could harm our brand, consumers could refuse to download it or demand a refund for any in-app purchases, and could pressure the digital storefront operators to no longer allow us to publish the game on their platforms. Similarly, if any of our games are introduced with defects or have playability issues, we may receive negative user reviews and our brand may be damaged. For example, our Racing Rivals title experienced playability and user interface issues after the release of an update in the fourth quarter of 2016 that introduced new graphics, which particularly affected users of some Android devices and harmed monetization of the game. These issues could be exacerbated if our customer service department does not timely and adequately address issues that our players have encountered with our games.

We have depended on a small number of games for a significant portion of our revenue in recent fiscal periods. If these games do not succeed or we do not release highly successful new games, our revenue would decline.

In the mobile gaming industry, new games are frequently introduced, but a relatively small number of games account for a significant portion of industry sales. Similarly, a significant portion of our revenue comes from a limited number of games, although the games in that group have shifted over time. Our top four titles for 2016, Kim Kardashian: Hollywood, Cooking Dash 2016, Tap Sports Baseball 2016, and Racing Rivals, each accounted for greater than 10% of our revenue in 2016 and collectively generated approximately 56.8% of our revenue during the period, while our top five titles for 2015, Kim Kardashian: Hollywood, Racing Rivals, Deer Hunter 2014, Contract Killer: Sniper and Cooking Dash 2016, each accounted for greater than 10% of our revenue in 2016 and collectively generated approximately 71.6% of our revenue during the period; no other game generated more than 10% of our revenue during the respective periods. While we expect that Covet Fashion and Design Home, titles we acquired through our acquisition of Crowdstar, will be significant revenue contributors during 2017 and help us broaden our product portfolio, we believe our revenue will still be highly dependent on a small number of titles. In particular, Kim Kardashian: Hollywood, which was launched in June 2014, has accounted for a significant portion of our revenue, having generated 17.8% and 30.7% of our revenue in 2016 and 2015, respectively; it was our largest revenue title in each of 2016, 2015 and 2014. We expect our dependency on a small number of games for a majority of our revenue will continue for the foreseeable future as we implement measures to make our successful games into platforms or evergreen titles and plan to release fewer titles in 2017 than we have in past years. Our evergreen titles strategy is one where we hope to reduce period over period declines in revenue from our existing successful titles and position ourselves to convert these into platforms that grow revenue on a year over year basis. However, we have limited experience or success with this strategy and may not succeed in implementing or executing on it, which could cause our revenue to decline in 2017. In addition, revenue from Kim Kardashian: Hollywood, one of our existing evergreen titles, is in part tied to the continued popularity of Kim Kardashian West and her marketing efforts through social

media and other channels, and we have little to no control over these matters and they are hard for us to predict. Accordingly, we must continue to launch new games that generate significant revenue to continue to grow revenue in the future, which we have sometimes failed to do. For example, the Katy Perry Pop title we launched in the fourth quarter of 2015, our Britney Spears: American Dream title that we launched in May 2016 and our Nicki Minaj: The Empire title that we launched in December 2016 all failed to generate meaningful revenue, and revenue from our Kendall & Kylie title declined significantly from its peak level following global launch in February 2016. We may similarly fail to generate significant revenue from the title featuring Taylor Swift that we will be releasing in 2017. In addition, sequels to some of our most successful game franchises have failed to download and monetize at the levels of predecessor versions, and we have experienced disappointing results from several games based on film franchises, including our James Bond: World of Espionage game. Failure to differentiate, innovate and otherwise improve our games and game franchises would lead to revenue declines.

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If our title featuring Taylor Swift does not succeed, our operating results and financial condition could be harmed and investors may question the viability of our celebrity product strategy.

We intend to launch a title featuring Taylor Swift in 2017, and have entered into agreements with additional celebrities to create games featuring their intellectual property. We face a number of risks in our ability to successfully develop and monetize games featuring celebrities, have encountered difficulties in doing so with respect to the titles we released in 2016 featuring celebrities and may be unable to fully recoup minimum guaranteed royalty payments made to such celebrities through the generation of ongoing revenue from our titles. For example, although Kim Kardashian: Hollywood has been by far the most successful mobile game featuring a celebrity and our Kendall & Kylie game achieved initial success following its worldwide launch in February 2016, we and other game developers have failed to achieve success with games featuring other celebrities, including our Katy Perry Pop, Britney Spears: American Dream and Nicki Minaj: The Empire titles. Further, we have been unable to sustain the initial success experienced by our Kendall & Kylie game while both Britney Spears: American Dream and Nicki Minaj: The Empire failed to attract a significant user base and downloads, resulting in lower monetization. Our failure to generate significant revenue from our celebrity titles since Kim Kardashian: Hollywood has resulted in us impairing a significant amount related to certain contractual minimum guarantee payments made to certain of our celebrity licensors. Accordingly, it is possible that there is something unique about Kim Kardashian West, the nature of her celebrity and the demographics and purchasing power of her fan base that has led to the continued and sustained success of Kim Kardashian: Hollywood that will not be replicable in games featuring other celebrities, particularly musicians. It is possible that our title featuring Taylor Swift may not be commercially successful in the same manner as our prior games featuring a female musician, Katy Perry Pop, Britney Spears: American Dream and Nicki Minaj: The Empire. In addition, some of the celebrities with whom we have partnered may have similar fan bases, and any actual overlap in the audiences for our different titles featuring celebrities could result in market saturation or cannibalization of revenue of our own titles. We must also differentiate our forthcoming titles in order to ensure our offerings remain fresh and engaging and to satisfy our celebrity partners. However, differentiating our various titles that feature celebrities could lead to increased development costs and potential product launch delays and may result in titles that do not monetize as well as Kim Kardashian: Hollywood. If our new titles that feature celebrities, including our upcoming Taylor Swift title, are not successful, our business and operating results would suffer and investors may question the viability of our celebrity product strategy.

We rely on a combination of our own servers and technology and third party infrastructure to operate our games. If we experience any system or network failures, unexpected technical problems, cyber attacks or any other interruption to our games, it could reduce our sales, increase costs, or result in a loss of revenue or loss of end users of our games.

We rely on digital storefronts and other third-party networks to deliver games to our players and on their or other third parties' billing systems to track and account for our game downloads. We also rely on our own servers and third-party infrastructure to operate our connected games, and we expect that our reliance on such third-party infrastructure and our technology platform will increase as we continue to add additional social features and functionality into our games. In particular, a significant portion of our game traffic is hosted by Amazon Web Services, which service provides server redundancy and uses multiple locations on various distinct power grids. Amazon may terminate its agreement with us upon 30 days' notice. In addition, Amazon has experienced brief power outages on occasion during the past several years that have affected the availability of certain of our games during such outages. While none of these events adversely impacted our business, a similar outage of a longer duration could. In addition, the operation of our online-only games depends on the continued functionality of our technology platform. As a result, we could experience unexpected technical problems with regard to the operation of our online-only games, particularly if the number of concurrent users playing our games is significantly more than we anticipate. Any technical problem with, cyber attack on, or loss of access to these third parties' or our systems, servers or other technologies, including our

technology platform, could result in the inability of end users to download or play our games, cause interruption to gameplay, prevent the completion of billing for a game or result in the loss of users' virtual currency or other in-app purchases, interfere with access to some aspects of our games or result in the theft of end-user personal information. For example, in July 2014, users could not play our Kim Kardashian: Hollywood game for about six hours due to a problem with one of our servers, and on five occasions during the last two years, we experienced similar outages with respect to our Racing Rivals game. Additionally, in October 2016 we experienced a short outage affecting our Tap Sports Baseball 2016 game. In addition, at launch in September 2015, our Eternity Warriors 4 title experienced intermittent server issues that left the game temporarily inoperable. In the first

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quarter of 2016 we experienced technical issues with our Kendall & Kylie title that caused users to lose their game play data, including accumulated virtual currency and achieved levels. If users are unable to access and play our games for any period of time, if virtual assets are lost, or if users do not receive their purchased virtual currency, we may receive negative publicity and game ratings, we may lose players of our games, we may be required to issue refunds, and we may become subject to regulatory investigation or class action litigation, any of which would negatively affect our business. Any of these problems could require us to incur substantial repair costs, distract management from operating our business and result in a loss of revenue.

Cyber attacks, security breaches, and computer viruses could harm our business, reputation, brand and operating results.

Cyber attacks, security breaches, and computer viruses have occurred on our systems in the past and may occur on our systems in the future. We store sensitive information, including personal information about our employees. In addition, our games involve the storage and transmission of players' personal information in our facilities and on our equipment, networks and corporate systems run by us or managed by third-parties including Apple, Google, and Facebook. Security breaches of our systems or the systems of third-parties on which we rely could expose us to litigation, remediation costs, increased costs for security measures, loss of revenue, damage to our reputation and potential liability. Our player data, corporate systems, third-party systems and security measures may be breached due to the actions of outside parties, employee error, malfeasance, a combination of these, or otherwise, and, as a result, an unauthorized party may obtain access to our data, our employees' data, our players' data or our advertisers' data. In addition, outside parties may attempt to fraudulently induce employees to disclose information in order to gain access to our data, our employees' data, our players' data or our advertisers' data. We were the victim of a cyber attack in early November 2014, when an animal rights group took down our main website and user forums, and in January 2016 another cyber attack caused us to take down our user forums for nearly a week. In May 2016, one of our employees fell victim to a spear phishing attack in which the employee uploaded sensitive employee information to a third party website. In October 2013, we were also the victim of a "CryptoLocker" ransomware attack that temporarily prevented our access to sensitive company files. Although these incidents did not result in a material loss of revenue, any future incidents, particularly of longer duration, could damage our brand and reputation and result in a material loss of revenue. Maintaining an international presence in China and elsewhere, we may place ourselves at increased risk of cyber attacks, such as the denial of service attacks that affected Sony Pictures in the fourth quarter of 2014. The low cost, relative ease and proliferation of internet enabled devices may also place us at increased risk of cyber attacks and, specifically, denial of service attacks, such as the denial of service attacks that affected Dyn in October 2016. In addition, as highlighted by reports that ISIS terrorists may have used Sony's PlayStation 4 network to plan attacks, the chat and other social features in our games could potentially be used by terrorist organizations or other criminals to communicate or for other nefarious purposes, which could severely damage our brand and reputation. If an actual or perceived security breach occurs, the market perception of the effectiveness of our security measures could be harmed, we could lose players and advertisers, and we could suffer significant legal and financial harm due to such events or in connection with remediation efforts and costs, investigation costs or penalties, litigation, regulatory and enforcement actions, changed security and system protection measures. Any of these actions could have a material and adverse effect on our business, reputation and operating results. In addition, the cost and operational consequences of investigating, remediating, eliminating and putting in place additional information technology tools and devices designed to prevent actual or perceived security breaches, as well as the costs to comply with any notification obligations resulting from such a breach, could have a significant impact on our financial and operating results.

If we fail to maintain and enhance our capabilities for porting games to a broad array of mobile devices, particularly those running the Android operating system, our revenue and financial results could suffer.

We derive the majority of our revenue from the sale of virtual goods within our games for smartphones and tablets that run Apple's iOS or Google's Android operating system. Unlike the Apple ecosystem in which Apple controls both the device (iPhone, iPod Touch and iPad) and the storefront (Apple's App Store), the Android ecosystem is highly fragmented since a large number of OEMs manufacture and sell Android-based devices that run a variety of versions of the Android operating system, and there are many Android-based storefronts in addition to the Google Play Store. For us to sell our games to the widest possible audience of Android users, we must port our games to a significant portion of the

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more than 1,000 Android-based devices that are commercially available, many of which have different technical requirements. Since the number of Android-based smartphones and tablets shipped worldwide is growing significantly, with more than one billion Android based devices sold worldwide in 2014, it is important that we maintain and enhance our porting capabilities, which could require us to invest considerable resources in this area. These additional costs could harm our business, operating results and financial condition. In addition, we must continue to increase the efficiency of our porting processes or it may take us longer to port games to an equivalent number of devices, which would negatively impact our margins. If we fail to maintain or enhance our porting capabilities, our revenue and financial results could suffer. For example, the technical issues we have experienced with our Kendall & Kylie title in the first quarter of 2016 and Racing Rivals title in the fourth quarter of 2016 appear to be more pronounced on certain Android devices, and this may have harmed the revenue we are able to generate from users on Android devices.

We use a game development engine licensed from Unity Technologies to create many of our games. If we experience any prolonged technical issues with this engine or if we lose access to this engine for any reason, it could delay our game development efforts and cause our financial results to fall below expectations for a quarterly or annual period, which would likely cause our stock price to decline.

We use a game development engine licensed from Unity Technologies to create many of our games, and we expect to continue to use this engine for the foreseeable future. Because we do not own this engine, we do not control its operation or maintenance nor do we control how the engine is updated or upgraded. As a result, any prolonged technical issues with this engine might not be resolved quickly, despite the fact that we have contractual service level commitments from Unity. In addition, to the extent that we require any functionality that is not offered by Unity, as was the case when Apple initially announced its 64-bit requirement, we are dependent on Unity to update or upgrade its engine to offer such functionality. Furthermore, although Unity cannot terminate our agreement absent an uncured material breach of the agreement by us, we could lose access to this engine under certain circumstances, such as a natural disaster that impacts Unity or a bankruptcy event. If we experience any prolonged issues with the operation of the Unity game development engine, if the Unity game development engine does not offer the functionality we require or if we lose access to this engine for any reason, it could delay our game development efforts and cause us to not meet revenue expectations for a quarterly or annual period, which would likely cause our stock price to decline. For example, in the first quarter of 2016, we were unable to implement a significant update to our Racing Rivals title due to programming bugs in the Unity game development engine, which update we believe could have helped to increase revenue for that title during the quarter. Further, if one of our competitors acquired Unity, the acquiring company would be less likely to renew our agreement, which expires in October 2017, which could impact our game development efforts in the future, particularly with respect to sequels to games that were created on the Unity engine.

We derive a significant portion of our revenue from advertisements and offers that are incorporated into our free-to-play games through relationships with third parties. If we lose the ability to provide these advertisements and offers for any reason, or if any events occur that negatively impact the revenue we receive from these sources, it would negatively impact our operating results.

We derive revenue from our free-to-play games through in-app purchases, advertisements and offers. We incorporate advertisements and offers into our games by implementing third parties' software development kits. We rely on these third parties to provide us with a sufficient inventory of advertisements and offers to meet the demand of our user base. If we exhaust the available inventory of these third parties, it will negatively impact our revenue. If our relationship with any of these third parties terminates for any reason, or if the commercial terms of our relationships do not continue to be renewed on favorable terms, we would need to locate and implement other third party solutions, which could negatively impact our revenue, at least in the short term. Furthermore, the revenue that we derive from



advertisements and offers is subject to seasonality, as companies' advertising budgets are generally highest during the fourth quarter and decline significantly in the first quarter of the following year, which negatively impacts our revenue in the first quarter (and conversely significantly increases our marketing expenses in the fourth quarter).

In addition, the actions of the storefront operators can also negatively impact the revenue that we generate from advertisements and offers. For example, in the second quarter of 2011, Apple began prohibiting virtual currency-incented advertising offers in games that directed users to download other applications from the Apple App Store in order to

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complete the offer. These offers accounted for approximately one-third of our revenue during the three months ended September 30, 2011, and our inability to use such offers has negatively impacted our revenue. In addition, during the second quarter of 2014, there were reports that Apple was considering prohibiting certain types of virtual currency-incented video advertising in games that promoted other applications available on the Apple App Store. These incented video advertisements generate a meaningful percentage of our overall revenue, and any prohibition of these advertisements would have had a negative impact on our revenue. Any similar changes in the future that impact our revenue that we generate from advertisements and offers could materially harm our business.

We may not, or may be unable to, renew our existing celebrity, brand and other content licenses when they expire and may not choose to obtain additional licenses or be able to obtain new licenses on favorable terms, which could negatively impact our revenue if we fail to replace such revenue with revenue from games based on our own intellectual property.

Although we generated 93.3% of our revenue from games based on our own intellectual property during 2013, that percentage declined to 62.7% in 2014, 42.1% in 2015 and 39.7% in 2016, largely due to the majority of our revenue being generated from games that are based on or substantially incorporate third-party intellectual property, such as Kim Kardashian: Hollywood, Kendall & Kylie, Racing Rivals, the Tap Sports Baseball franchise and Gordon Ramsay DASH. We expect our revenue derived from games based on or substantially incorporating third-party intellectual property to increase further in 2017, as we expect to continue to derive significant revenue from Kim Kardashian: Hollywood, Racing Rivals, Tap Sports Baseball 2016, and Gordon Ramsay DASH, and the majority, or potentially all of the titles, we release in 2017 will feature or otherwise leverage celebrities or other third-party licensed brands, properties or other content, including our Taylor Swift title and MLB Tap Sports Baseball 2017 which will include licensed content from the MLB in addition to the MLBPA and MLBAAA. Certain of our licenses expire at various times during the next several years, and we may be unable to renew these licenses on terms favorable to us or at all, and we may have difficulties obtaining licenses from new celebrities on terms acceptable to us, if at all. In addition, these licensors could decide to license to our competitors or develop and publish their own mobile games, competing with us in the marketplace. We also license certain brands and their assets for our Covet Fashion and Design Home titles without the provision of a license fee or royalty. These licensors could decide to no longer license their assets under the current terms, and to instead charge a one-time payment, ongoing royalty or both, which may adversely affect the profitability of these titles. Failure to maintain or renew our existing licenses or to obtain additional licenses would prevent us from continuing to offer our current licensed games and introducing new mobile games based on such licensed content, which could harm our business, operating results and financial condition.

We publish games developed by third parties, which exposes us to a number of potential operational and legal risks.

Publishing games developed by third parties exposes us to a number of potential operational and legal risks. For example, we may be required to provide third party developers with upfront license fees or non-recoupable minimum guaranteed royalties in order to obtain the rights to publish their games, and we may incur significant costs marketing these games after they have been commercially launched. For example, we agreed to significant license fee and minimum guaranteed royalty payments to an affiliate of Tencent to license and publish Tencent's WeFire game in the United States and international markets outside of Asia under the title Rival Fire. Due to Rival Fire's poor performance in terms of downloads and monetization since its launch in July 2016, we impaired \$14.5 million in 2016 related to these payments. Other third-party games that we license and publish may not be commercially successful, particularly if they fail to appeal to Western audiences, and may not generate the amount of revenue necessary for us to fully recoup minimum guaranteed royalty and license fee payments. We and other mobile gaming companies have failed in the past to achieve commercial success in bringing successful games developed and launched in Asia to Western markets, including with respect to our efforts to publish and monetize Rival Fire. In addition, if any of the games

created by third party developers with which we work infringe intellectual property owned by others, or otherwise violate any third party's rights or any applicable laws and regulations, such as laws with respect to data collection and privacy, we would be exposed to potential legal risks by publishing these games.

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Our business and growth may suffer if we are unable to hire and retain key personnel.

Our future success will depend, to a significant extent, on our ability to attract, retain and motivate our key personnel, namely our management team, creative leaders and experienced game development personnel. In particular, we experienced a change in our management team in November 2016 which included the appointment of Nick Earl as our President and Chief Executive Officer and Niccolo de Masi as our Executive Chairman. Each of Mr. Earl and Mr. de Masi is critical to our vision, strategic direction, products and technology and the continued retention of the remaining senior management team is important to our continued development. In addition, to grow our business, execute on our business strategy and replace departing employees, we must identify, hire and retain qualified personnel, particularly creative leaders and additional game development teams to support our new product launches and monetization, live operations, server technology, user experience and product management personnel to support our platform and evergreen games. Attracting and retaining proven creative leaders is difficult in a competitive hiring market. We intend to hire two to four additional creative leaders during the remainder of 2017, and we may not be able to attract these creative leaders or retain our existing creative leaders. The gaming and technology industries are also traditionally male dominated, so it may be difficult for us to recruit and retain talented female personnel who may be needed to help us optimize our games that are targeted to a more female-focused audience, including our games in the fashion and celebrity, food and home genres. Recent stock price declines, the lack of success of many of our product launches in 2016 and recent headcount reductions may make it more difficult for us to attract and retain top talent. Competition for qualified management, game development and other staff is intense, particularly in the San Francisco Bay Area where we are headquartered. In addition, attracting and retaining qualified personnel may be particularly difficult for us if our stock price continues to decline or remains at current levels, since individuals may elect to seek employment with other companies that they believe have better long-term prospects or that present better opportunities for earning equity-based compensation. Competitors have in the past and may in the future attempt to recruit our employees, and our management and key employees are not bound by agreements that could prevent them from terminating their employment at any time. As we continue to develop expertise in free-to-play mobile gaming and building and maintaining platform and evergreen titles, our competitors may increasingly seek to recruit our employees, particularly from our development studios. In addition, we do not maintain a key-person life insurance policy on any of our officers. Our business and growth may suffer if we are unable to hire and retain key personnel.

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

During the last several years we have implemented certain restructuring actions and cost reduction initiatives to streamline operations and improve cost efficiencies. Our most recent restructurings included reductions in personnel in Bellevue, Washington, San Francisco, California and Long Beach, California. We plan to continue to manage costs to better and more efficiently manage our business. This most recent restructuring plan and other such efforts could result in disruptions to our operations and adversely affect our business. In addition, we cannot be sure that the cost reduction and streamlining initiatives will be as successful in reducing our overall expenses as we expect or that additional costs will not offset any such reductions or streamlining. 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.

We may not realize the benefits expected through our strategic relationship with Tencent and other aspects of the relationship could have adverse effects on our business.

In April 2015, we entered into a strategic relationship with Tencent, a leading Internet company in China and arguably the world's largest gaming company. Tencent, through a controlled affiliate, agreed to invest \$126.0 million in exchange for approximately 16.3% of our total outstanding common stock on a post-transaction basis. In November

2015, we entered into an agreement with an affiliate of Tencent to license and publish its game, WeFire, in the United States and international markets outside of Asia under the name Rival Fire, which we launched in July 2016. In light of the poor performance of the title in terms of monetization and downloads, and the related contractual prepaid royalty commitments and license fees under our agreement with the affiliate of Tencent, we impaired \$14.5 million in the third quarter of 2016. In addition, we may not succeed in entering into any other agreements or operating partnerships with Tencent in the future. Even if we do enter into additional operational partnerships, it could take months to years to fully

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realize the benefits of such partnerships and, to the extent such agreements involve publishing our games in China, some of our platform partners in China and other parts of Asia may view such a partnership negatively, and in fact, some partners in China may already view the fact that Tencent is a significant investor in us negatively, and we may find it more difficult to obtain featuring of our games from such partners in China going forward.

Tencent, through its controlled affiliates, held approximately 20.9% of the aggregate voting power of our common stock as of February 28, 2017, and could acquire up to 25.0% of the voting power through open-market purchases of our common stock. While Tencent has agreed to cause these shares to be voted with the majority recommendation of the independent members of our board of directors on most matters, Tencent could have considerable influence over matters such as approving a potential acquisition of us. Tencent was also granted the right to designate a member of our board of directors, initially appointing Tencent Senior Vice President, Steven Ma, and in January 2017 appointing Ben Feder, Tencent's President of International Partnerships (North America), as Mr. Ma's replacement on Glu board of directors. Mr. Feder or any future Tencent designee could have an actual or apparent conflict of interest in such matters. Tencent's investment in and position with us could also discourage others from pursuing any potential acquisition of us, which could have the effect of depriving the holders of our common stock of the opportunity to sell their shares at a premium over the prevailing market price.

Our reported financial results could be adversely affected by changes in financial accounting standards or by the application of existing or future accounting standards to our business as it evolves.

Our reported financial results are impacted by the accounting policies promulgated by the SEC and accounting standards bodies and the methods, estimates and judgments that we use in applying our accounting policies. The frequency of accounting policy changes may accelerate, including conversion to unified international accounting standards. Policies affecting revenue recognition have affected, and could further significantly affect, the way we account for revenue. For example, the accounting for revenue derived from smartphone platforms and free-to-play games, particularly with regard to revenue generated from online digital storefronts, is still evolving and, in some cases, uncertain. In particular, we were required to file an amendment to our Annual Report on Form 10-K for the year ended December 31, 2012 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013 to restate or revise the financial statements contained in those reports (including for the year ended December 31, 2011) because we did not correctly apply the applicable revenue recognition accounting guidance relating to our smartphone revenue. While we believe that we are now correctly accounting for our smartphone revenue, this is an area that continues to involve significant discussion among accounting professionals and which is not completely settled. It is possible that the relative application, interpretation and weighting of the factors that relate to whether we should be considered the principal in the sales transaction of games sold through digital storefronts may evolve, and we may in the future conclude that our new accounting policy for smartphone revenue, as reflected in the restated financial statements, is incorrect, which could result in another restatement of affected financial statements. In addition, we currently defer revenue related to virtual goods and currency over the average playing period of paying users, which approximates the estimated weighted average useful life of the transaction. While we believe our estimates are reasonable based on available game player information, we may revise such estimates in the future as our games' operation periods change. Any adjustments arising from changes in the estimates of the lives of these virtual items would be applied to the current quarter and prospectively on the basis that such changes are caused by new information indicating a change in the game player behavior patterns of our paying users. Any changes in our estimates of useful lives of these virtual items may result in our revenue being recognized on a basis different from prior periods' and may cause our operating results to fluctuate. As we enhance, expand and diversify our business and product offerings, the application of existing or future financial accounting standards, particularly those relating to the way we account for our smartphone revenue, could have a significant adverse effect on our reported results although not necessarily on our cash flows.

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

Maintaining effective internal control over financial reporting is necessary for us to produce reliable financial statements. In connection with the restatement of our financial statements in our Annual Report on Form 10-K for the year ended December 31, 2012 and our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013,

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management, including our Chief Executive Officer and Chief Financial Officer, reassessed the effectiveness of our internal control over financial reporting as of December 31, 2012. Based on this reassessment using the guidelines established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in 1992, management had concluded that we did not maintain effective internal control over financial reporting as of December 31, 2012 because of a material weakness related to the application of revenue accounting guidance to our smartphone revenue for sales through digital storefronts. This control deficiency resulted in the misstatement of our revenue and cost of revenue, including gross margin percentages, and the related balance sheet accounts and financial disclosures for the years ended December 31, 2011 and 2012 (and the restatement of unaudited interim condensed consolidated financial statements for the quarters ended March 31, June 30, and September 30 for such years). Although we have remediated this material weakness, if we are otherwise unable to maintain adequate internal controls for financial reporting, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal controls as required pursuant to the Sarbanes-Oxley Act, it could result in another material misstatement of our financial statements that would require a restatement, investor confidence in the accuracy and timeliness of our financial reports may be impacted or the market price of our common stock could be negatively impacted.

Conversion of key internal systems and processes, particularly our ERP system, and problems with the design or implementation of these systems and processes could interfere with, and therefore harm, our business and operations.

We have underway a multi-phase project to convert certain key internal systems and processes, including our enterprise resource planning, or ERP, system to a cloud based system. In August 2016 we implemented major changes to our ERP system, which activities we expect to continue into 2017. In connection with the transition to our new ERP system in the third quarter of 2016, we shutdown certain of our legacy ERP systems in the third quarter of 2016, which affected certain of our processes in the second half of 2016 and may impact our processes in 2017. While we have transitioned to our new ERP system, we may need to resolve issues that arise in connection with this transition. We have invested, and will continue to invest, significant capital and human resources in the design and implementation of these systems and processes. Any problems, disruptions, delays or other issues in the design and implementation of the new systems or processes, particularly any that impact our operations, could adversely affect our ability to process payments, record and transfer information in a timely and accurate manner, recognize revenue, file SEC reports in a timely manner, or otherwise run our business. Even if we encounter these adverse effects, as noted above, the design and implementation of these new systems and processes may be much more costly than we anticipated and in the event of lengthy project delays, we may experience issues with retention of the implementation team. If we are unable to successfully design and implement these new systems and processes as planned, or if the implementation of these systems and processes is more lengthy or costly than anticipated, our business, financial condition, and results of operations could be negatively impacted.

Our business will suffer if our acquisition and strategic investment activities are unsuccessful or disrupt our ongoing business, which may involve increased expenses and may present risks not contemplated at the time of the transactions.

We have acquired and invested in, and may continue to acquire and invest in, companies, products and technologies that complement our strategic direction. Acquisitions and investments involve significant risks and uncertainties, including:

- diversion of management's time and a shift of focus from operating the business to issues related to negotiation of acquisition or investment terms, integration and administration;
-



our ability to successfully integrate acquired technologies and operations into our business and maintain uniform standards, controls, policies and procedures;

- potential employee morale and retention issues resulting from any reductions in compensation, or changes in management, reporting relationships, or future prospects;

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- potential product development delays resulting from any changes and disruptions that may follow the acquisition;
- significant competition from other acquirors and investors as the gaming industry consolidates and challenges in offering attractive consideration given the volatility of our stock price and potential difficulties in obtaining alternative financing;
- challenges retaining the key employees, customers and other business partners of the acquired or investee business;
- our ability to realize synergies expected to result from an acquisition or strategic investment;
- an impairment of acquired goodwill and other intangible assets or investments in future periods would result in a charge to earnings in the period in which the write-down occurs, such as the case with each of the charges we took in the second and third quarters of 2016 for our investments in Plain Vanilla;
- the internal control environment of an acquired or investee entity may not be consistent with our standards and may require significant time and resources to improve;
- in the case of foreign acquisitions or strategic investments, 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;
- liability for activities of the acquired or investee companies before the acquisition or investment, including violations of laws, rules and regulations, commercial disputes, tax liabilities, intellectual property and other litigation claims or disputes, accounting standards and other known and unknown liabilities;
- harm to our brand and reputation; and
- harm to our existing business relationships with business partners and advertisers as a result of the acquisition.

In particular, we acquired Crowdstar in the fourth quarter of 2016 in a multi-step transaction that did not involve the cooperation of Crowdstar's management, where the former Chief Executive Officer of Crowdstar did not continue with the company post-acquisition and where we did not receive customary representations, warranties or indemnities from the acquired company. While the integration of Crowdstar into our company has to date proceeded relatively smoothly and Crowdstar's top titles, Covet Fashion and Design Home, are generating significant revenue, we still face risks and uncertainties in connection with completing this integration, including the risk of retaining key employees, the loss of whom could affect revenue derived from Covet Fashion and Design Home.

In addition, if we issue equity securities as consideration in an acquisition or strategic investment, as we did for our acquisitions of Griptonite, Inc., Blammo Games Inc., GameSpy Industries, Inc., PlayFirst, Inc. and Cie Games, Inc., our current stockholders' percentage ownership and earnings per share would be diluted. We may also need to raise additional capital in the event we use a significant amount of cash as consideration in an acquisition. Because acquisitions and strategic investments are inherently risky, our transactions may not be successful and may, in some cases, harm our operating results or financial condition.

Changes in foreign exchange rates and limitations on the convertibility of foreign currencies could adversely affect our business and operating results.

We currently transact business in more than 100 countries and in dozens of different currencies, with Pounds Sterling, Euros and Chinese Renminbi being the primary international currencies in which we transact business.

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Conducting business in currencies other than U.S. Dollars subjects us to fluctuations in currency exchange rates that could have a negative impact on our reported operating results. We experienced significant fluctuations in currency exchange rates in 2015 and 2016, and expect to experience continued significant fluctuations in the future. We incur expenses for employee compensation and other operating expenses at our non-U.S. locations in the local currency, and an increasing percentage of our international revenue is from customers who pay us in currencies other than the U.S. Dollar. Fluctuations in the exchange rates between the U.S. Dollar and those other currencies could result in the U.S. Dollar equivalent of these expenses being higher and/or the U.S. Dollar equivalent of the foreign-denominated revenue being lower than would be the case if exchange rates were stable. This could negatively impact our operating results. Conversely, economic issues in Russia led to a significant devaluation of the Ruble compared to the U.S. Dollar through the second quarter of 2016. While the Ruble has recovered somewhat since historic lows in the second quarter of 2016, it remains significantly devalued, which has reduced the effective salaries of our employees in our Moscow studio. As a result, we may be at risk of losing key employees to competitors who are willing to offer higher effective wages. To date, we have not engaged in exchange rate hedging activities, and we do not expect to do so in the foreseeable future.

We face additional risk if a currency is not freely or actively traded. Some currencies, such as the Chinese Renminbi in which our Chinese operations principally transact business, are subject to limitations on conversion into other currencies, which can limit our ability to react to rapid foreign currency devaluations and to repatriate funds to the United States should we require additional working capital.

We face added business, political, regulatory, operational, financial and economic risks as a result of our international operations and distribution, any of which could increase our costs and adversely affect our operating results.

International sales represented approximately 25.7%, 31.3% and 40.6% of our revenue during 2016, 2015 and 2014, respectively. To target international markets, we develop games that are customized for consumers in those markets. We have international offices located in a number of foreign countries including Canada, China, India, Japan and Russia. We expect to increase our international presence, as we intend to increase the number of our employees in our Hyderabad, India office. Risks affecting our international operations include:

- our ability to develop games that appeal to the tastes and preferences of consumers in international markets;
- difficulties developing, staffing, and simultaneously managing a large number of varying foreign operations as a result of distance, language, and cultural differences;
- multiple and conflicting laws and regulations, including complications due to unexpected changes in these laws and regulations;
- our ability to develop, customize and localize games that appeal to the tastes and preferences of consumers in international markets;
- competition from local game developers that have significant market share in certain foreign markets and a better understanding of local consumer preferences;
- potential violations of the Foreign Corrupt Practices Act and local laws prohibiting improper payments to government officials or representatives of commercial partners;
- regulations that could potentially affect the content of our products and their distribution, particularly in China where multiple governmental bodies must review and approve of any gaming application before it may be published;
- foreign exchange controls that might prevent us from repatriating income earned in countries outside the United States, particularly China;



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- potential adverse foreign tax consequences, since due to our international operations, we must pay income tax in numerous foreign jurisdictions with complex and evolving tax laws;
- political, economic and social instability, including the ongoing hostilities in Syria and the Crimea region and, in particular, any continued economic issues in Russia, which could potentially negatively impact us given that we have a development studio in Moscow;
- restrictions on the export or import of technology;
- trade and tariff restrictions and variations in tariffs, quotas, taxes and other market barriers; and
- difficulties in enforcing intellectual property rights in certain countries.

These risks could harm our international operations, which, in turn, could materially and adversely affect our business, operating results and financial condition. In particular, we have over 100 employees located at our development studio in Moscow, Russia. Continuing economic issues in Russia, including the destabilization of the Ruble, could lead to unstable political conditions, civil unrest or other developments that could materially affect our business, including through distractions and potential hardships to our Russian employees, restrictions on our ability to fund our Russian operations, and other difficulties that could cause delays to our game launches or even the cancellation of a game release and otherwise affect our ability to update and maintain games operated by our Moscow studio.

We may also liquidate or cease operating some of our foreign subsidiaries in the future which may raise additional risks. For example, we are in the process of winding down and liquidating certain of our subsidiaries in China. These liquidation efforts will require us to obtain approvals from various government agencies in China, which could impose taxes and penalties upon us related to such liquidations. In addition, we may face difficulties in repatriating cash from our subsidiaries in China.

If we fail to deliver our games at the same time as new mobile devices are commercially introduced, our revenue may suffer.

Our business depends, in part, on the commercial introduction of new mobile devices with enhanced features, including larger, higher resolution color screens, improved audio quality, and greater processing power, memory, battery life and storage. For example, the introduction of new and more powerful versions of Apple's iPhone and iPad and devices based on Google's Android operating system, have helped drive the growth of the mobile games market. In addition, consumers generally purchase the majority of content, such as our games, for a new device within a few months of purchasing it. We do not control the timing of these device launches. The mobile games market could also be disrupted by new technologies, such as the introduction of next generation virtual reality devices. Some manufacturers give us access to their new devices prior to commercial release. If one or more major manufacturers were to stop providing us access to new device models prior to commercial release, we might be unable to introduce games that are compatible with the new device when the device is first commercially released, and we might be unable to make compatible games for a substantial period following the device release. If we do not adequately build into our title plan the demand for games for a particular mobile device or experience game launch delays, we miss the opportunity to sell games when new mobile devices are shipped or our end users upgrade to a new mobile device, our revenue would likely decline and our business, operating results and financial condition would likely suffer.

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

While the number of people using mobile Internet-enabled devices, such as smartphones and tablet devices, has increased dramatically in the past few years, the mobile market, particularly the market for mobile games, is still emerging, and it may not grow as we anticipate. Our future success is substantially dependent upon the continued

growth of use of mobile devices for games, as opposed to social media applications or other uses. The proliferation of mobile

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devices may not continue to develop at historical rates and consumers may not continue to use mobile Internet-enabled devices as platforms for games. We believe that historic rates of adoption and download of new applications in the United States will not continue to rise, and will instead decline, as the U.S. mobile application market enters a mature state. In addition, new and emerging technologies could make the mobile devices on which our games are currently released obsolete, requiring us to transition our business model to develop games for other next-generation platforms.

Our business is subject to increasing governmental regulation. If we do not successfully respond to these regulations, our business may suffer.

We are subject to a number of domestic and foreign laws and regulations that affect our business. Not only are these laws constantly evolving, which could result in their being interpreted in ways that could harm our business, but legislation is also continually being introduced that may affect both the content of our products and their distribution. In the United States, for example, numerous federal and state laws have been introduced which attempt to restrict the content or distribution of games. Legislation has been adopted in several states, and proposed at the federal level, that prohibits the sale of certain games to minors. If such legislation is adopted, it could harm our business by limiting the games we are able to offer to our customers or by limiting the size of the potential market for our games. We may also be required to modify certain games or alter our marketing strategies to comply with new and possibly inconsistent regulations, which could be costly or delay the release of our games. For example, the United Kingdom's Office of Fair Trading issued new principles in January 2014 relating to in-app purchases in free-to-play games that are directed towards children 16 and under, which principles became effective in April 2014. In addition, in response to a request made by the European Commission, Google no longer labels free-to-play games as free in European Union countries. Similarly, in the fourth quarter of 2014, Apple changed its label for free-to-download applications from "FREE" to "GET" in the Apple App Store. The FTC has also indicated that it intends to review issues related to in-app purchases, particularly with respect to games that are marketed primarily to minors; the FTC reached settlement agreements with Apple and Google on this subject and recently won a lawsuit against Amazon on this subject. If the FTC issues rules significantly restricting or even prohibiting in-app purchases, it would significantly impact our business strategy. In addition, two self-regulatory bodies in the United States (the Entertainment Software Rating Board) and in the European Union (Pan European Game Information (PEGI)) provide consumers with rating information on various products such as entertainment software similar to our products based on the content (for example, violence, sexually explicit content, language). Furthermore, the Chinese government has adopted measures designed to eliminate violent or obscene content in games, along with regulations that may require us to obtain approval from certain government agencies in China, including the Ministry of Culture and General Administration of Press and Publication, in order to continue to publish any of our games in China. Any one or more of these factors could harm our business by limiting the products we are able to offer to our customers, by limiting the size of the potential market for our products, or by requiring costly additional differentiation between products for different territories to address varying regulations.

Furthermore, the growth and development of free-to-play gaming and the sale of virtual goods may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies such as ours. We anticipate that scrutiny and regulation of our industry will increase and that we will be required to devote legal and other resources to addressing such regulation. For example, existing laws or new laws regarding the regulation of currency and banking institutions may be interpreted to cover virtual currency or goods. If that were to occur we may be required to seek licenses, authorizations or approvals from relevant regulators, the granting of which may depend 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 United States or elsewhere regarding these activities may dampen the growth of

free-to-play gaming and impair our business.

We sometimes offer our players various types of sweepstakes, giveaways and promotional opportunities, and launched a version of our Frontline Commando: D-Day game utilizing the Skillz technology platform that allowed players to compete against each other in tournaments for cash prizes. We have also in the past through a partnership with Probability PLC offered a suite of Glu branded mobile slots games in the United Kingdom and might continue to explore opportunities with respect to real money gambling. We are subject to laws in a number of jurisdictions concerning the operation and offering of such activities and games, many of which are still evolving and could be interpreted in ways that



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could harm our business. Any court ruling or other governmental action that imposes liability on providers of online services could result in criminal or civil liability and could harm our business.

In addition, because our services are available worldwide, certain foreign jurisdictions and others may claim that we are required to comply with their laws, including in jurisdictions where we have no local entity, employees or infrastructure.

The laws and regulations concerning data privacy and data security are continually evolving, and our actual or perceived failure to comply with these laws and regulations could harm our business.

We are subject to federal, state and foreign laws regarding privacy and the protection of the information that we collect regarding our users, which laws are currently in a state of flux and likely to remain so for the foreseeable future. The U.S. government, including the FTC and the Department of Commerce, is continuing to review the need for greater regulation over collecting information concerning consumer behavior on the Internet and on mobile devices. For example, the European Union's General Data Protection Regulation, which will become effective in May 2018, creates new individual privacy rights and imposes worldwide obligations on companies handling personal data, which will result in a greater compliance burden for us and other companies with European users. Various U.S. state and federal regulators have also continued to expand the scope of data elements worthy of, and subject to, privacy protections, creating a multi-layered regulation regime that may be applicable to our business and will require time and resources to address. Additionally, the Children's Online Privacy Protection Act requires companies to obtain parental consent before collecting personal information from children under the age of 13. In January 2014, the FTC announced a settlement with Apple related to in-app purchases made by minors. In April 2016, the FTC was also successful in a lawsuit against Amazon, with a Federal District Court granting summary judgment in favor of the FTC, finding Amazon liable for unfairly billing consumers for unauthorized in-app purchases by minors. If we do not follow existing laws and regulations, as well as the rules of the smartphone platform operators, with respect to privacy-related matters, or if consumers raise any concerns about our privacy practices, even if unfounded, it could damage our reputation and operating results.

All of our games are subject to our privacy policy and our terms of service located on our corporate website. If we fail to comply with our posted privacy policy, terms of service or privacy-related laws and regulations, including with respect to the information we collect from users of our games, it could result in proceedings against us by governmental authorities or others, which could harm our business. In addition, interpreting and applying data protection laws to the mobile gaming industry is often unclear. These laws may be interpreted and applied in conflicting ways from state to state, country to country, or region to region, and in a manner that is not consistent with our current data protection practices. Complying with these varying requirements could cause us to incur additional costs and change our business practices. Further, if we fail to adequately protect our users' privacy and data, it could result in a loss of player confidence in our services and ultimately in a loss of users, which could adversely affect our business.

In the area of information security and data protection, many states have passed laws requiring notification to users when there is a security breach for personal data, such as the 2002 amendment to California's Information Practices Act, or requiring the adoption of minimum information security standards that are often vaguely defined and difficult to implement. Costs to comply with these laws may increase as a result of changes in interpretation. Furthermore, any failure on our part to comply with these laws may subject us to significant liabilities. The security measures we have in place to protect our data and the personal information of our employees, customers and partners could be breached due to cyber-attacks initiated by third party hackers, employee error or malfeasance, fraudulent inducement of our employees to disclose sensitive information or otherwise. Because the techniques used to obtain unauthorized

access, disable or degrade service or sabotage systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any breach or unauthorized access could materially interfere with our operations or our ability to offer our services or result in significant legal and financial exposure, damage to our reputation and a loss of confidence in the security of our data, which could have an adverse effect on our business and operating results.

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Our stock price has fluctuated and declined significantly since our initial public offering in March 2007, and may continue to fluctuate, may not rise and may decline further.

The trading price of our common stock has fluctuated in the past and is expected to continue to fluctuate in the future, as a result of a number of factors, many of which are outside our control, such as changes in the operating performance and stock market valuations of other technology companies generally, or those in our industry in particular, such as Electronic Arts and Zynga. We also experience stock price volatility as investors monitor the performance of our games through third-party tools, such as App Annie, the Apple App Store's "Top Grossing" rankings and other measurements of the performance of our games.

In addition, The NASDAQ Global Market on which our common stock is listed has recently and in the past experienced extreme price and volume fluctuations that have affected the market prices of many companies, some of which appear to be unrelated or disproportionate to their operating performance. These broad market fluctuations could adversely affect the market price of our common stock. In the past, following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. Securities class action litigation against us could result in substantial costs and divert our management's attention and resources.

If we do not adequately protect our intellectual property rights, it may be possible for third parties to obtain and improperly use our intellectual property and our business and operating results may be harmed.

Our intellectual property is essential to our business. We rely on a combination of patent, copyright, trademark, trade secret and other intellectual property laws and contractual restrictions on disclosure to protect our intellectual property rights. To date, we have only four issued U.S. patents (including a corresponding Patent Cooperation Treaty (PCT) international patent for three of the four U.S. patents) and only seven U.S. patent applications currently outstanding, including one that we inherited through acquisitions (and we have four corresponding PCT international patent applications), so we will not be able to protect the majority of our technologies from independent invention by third parties. In addition, we have filed foreign patent applications on three of our eight U.S. patent applications and one of the issued U.S. patents, and an additional foreign patent application for our one of our issued U.S. patents. Despite our efforts to protect our intellectual property rights, unauthorized parties may attempt to copy or otherwise to obtain and use our technology and games, and some parties have distributed "jail broken" versions of our games where all of the content has been unlocked and made available for free. Further, some of our competitors have released games that are nearly identical to successful games released by their competitors in an effort to confuse the market and divert users from the competitor's game to the copycat game. We believe that these tactics were employed by Hothead Games in their game Kill Shot, which we believed infringed certain Glu copyrights and trade dress contained in our Deer Hunter 2014 game. We initiated litigation against Hothead Games in November 2014, and we entered into a settlement agreement with Hothead in August 2015 in which Hothead agreed to make payments to us, including ongoing payments, and we agreed to allow Hothead to continue to publish the Kill Shot game. To the extent competitors continue to copy our games, it could reduce the amount of revenue we are able to generate from any infringed games. Monitoring unauthorized use of our games is difficult and costly, and we cannot be certain that the steps we have taken will prevent piracy and other unauthorized distribution and use of our technology and games, particularly in certain international jurisdictions, such as China, where the laws may not protect our intellectual property rights as fully as in the United States. In the future, we may institute additional litigation to enforce our intellectual property rights, which could result in substantial costs and divert our management's attention and our resources.

In addition, although we require our third-party developers to sign agreements not to disclose or improperly use our trade secrets, to acknowledge that all inventions, trade secrets, works of authorship, developments and other processes generated by them on our behalf are our property and to assign to us any ownership they may have in those works, it may still be possible for third parties to obtain and improperly use our intellectual properties without our consent. This could harm our brand, business, operating results and financial condition.

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We may become involved in intellectual property disputes, which may disrupt our business and require us to pay significant damage awards.

Third parties may sue us for intellectual property infringement, or initiate proceedings to invalidate our intellectual property, which, if successful, could disrupt our business, cause us to pay significant damage awards or require us to pay licensing fees. For example, on August 20, 2014, Inventor Holdings, LLC, a Delaware limited liability company, filed a complaint in the U.S. District Court for the District of Delaware alleging that we were infringing one of its patents and seeking unspecified damages, including interest, costs, expenses and an accounting of all infringing acts, attorneys' fees and such other costs as the Court deems just and proper. In September 2015, the Court granted our motion to dismiss the case brought by Inventor Holdings. In addition, in November 2014, Telinit Technologies, LLC, a Texas company, filed a complaint in the U.S. District Court for the Eastern District of Texas, Marshall Division, alleging that we were infringing one of its patents and seeking unspecified damages, attorneys' fees and costs. We settled the dispute with Telinit for an immaterial amount in January 2015. Finally, in November 2015, Just Games Interactive LLC (d/b/a Kung Fu Factory, f/k/a Tiny Fun Studios), or Just Games, filed a complaint against us and Kristen Jenner (f/k/a Kris Kardashian) in the U.S. District Court for the Central District of California. The complaint alleged direct copyright infringement against us and seeking at least \$10.0 million in damages as well as other relief, including costs, permanent and temporary injunctive relief, an accounting of profits, a constructive trust and such other costs the Court deemed just and proper. We filed a motion to dismiss the complaint on January 27, 2016. On February 1, 2016, Just Games filed a voluntary motion to dismiss their case against us without prejudice. Despite our prior successes in defending against such claims, claims against us in the future could result in our being enjoined from using our intellectual property or licensed intellectual property, and we might incur significant licensing fees and could be forced to develop alternative technologies. We may also be required to pay penalties, judgments, royalties or significant settlement costs. If we fail or are unable to develop non-infringing technology or games or to license the infringed or similar technology or games on a timely basis, we may be forced to withdraw games from the market or be prevented from introducing new games. We might also incur substantial expenses in defending against third-party claims, regardless of their merit.

In addition, we use open source software in some of our games and expect to continue to use open source software in the future. 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 and operating results.

We may become a party to litigation and regulatory inquiries, which could result in an unfavorable outcome and have an adverse effect on our business, financial condition, results of operation and cash flows.

We may become subject to various legal proceedings, claims and regulatory inquiries that arise out of the ordinary conduct of our business and are not yet resolved and additional claims and inquiries may arise in the future. In addition, events may occur that give rise to a potential risk of litigation. The number and significance of regulatory inquiries have increased as our business has grown and evolved. Any proceedings, claims or inquiries initiated by or against us, whether successful or not, may be time consuming; result in costly litigation, damage awards, consent decrees, injunctive relief or increased costs of doing business, require us to change our business practices or products, require significant amounts of management time, result in diversion of significant operations resources or otherwise harm our business and future financial results.

“Cheating” programs, scam offers, black-markets and other offerings or actions by unrelated third parties that seek to exploit our games and players affect the game-playing experience and may lead players to stop playing our games or divert revenue to unrelated third parties.

Unrelated third parties have developed, and may continue to develop, “cheating” programs, scam offers, black-markets and other offerings that may decrease our revenue generated from our virtual economies, divert our players from our games or otherwise harm us. Cheating programs enable players to exploit vulnerabilities in our games to obtain

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virtual currency or other items that would otherwise generate in-app purchases for us, play the games in automated ways or obtain unfair advantages over other players who do play fairly. Unrelated third parties attempt to scam our players with fake offers for virtual goods or other game benefits. We devote resources to discover and disable these programs and activities, but if we are unable to do so in a prompt and timely manner, our operations may be disrupted, our reputation damaged and players may play our games less frequently or stop playing our games altogether. This may lead to lost revenue from paying players, increased cost of developing technological measures to combat these programs and activities, legal claims relating to the diminution in value of our virtual currency and goods, and increased customer service costs needed to respond to disgruntled players.

Unanticipated changes in our income tax rates or exposure to additional tax liabilities may affect our future financial results.

Our future effective income tax rates may be favorably or unfavorably affected by unanticipated changes in the valuation of our deferred tax assets and liabilities, or by changes in tax laws or their interpretation. Determining our worldwide provision for income taxes requires significant judgments. The estimation process and applicable laws are inherently uncertain, and our estimates are not binding on tax authorities. Our effective tax rate could also be adversely affected by a variety of factors, many of which are beyond our control. Recent and contemplated changes to U.S. tax laws, including limitations on a taxpayer's ability to claim and utilize foreign tax credits and defer certain tax deductions until earnings outside of the United States are repatriated to the United States, could impact the tax treatment of our foreign earnings. Further, the taxing authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, including our transfer pricing, or determine that the manner in which we operate our business is not consistent with the manner in which we report our income to the jurisdictions, which could increase our worldwide effective tax rate and harm our financial position and results of operations. Foreign tax authorities may also interpret or change tax regulations such that we may be subject to tax liabilities upon closure or liquidation of a foreign subsidiary. In addition, we are subject to the continuous examination of our income tax returns by the Internal Revenue Service and other tax authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine if our provision for income taxes is adequate. These continuous examinations may result in unforeseen tax-related liabilities, which may harm our future financial results.

We must charge, collect and/or pay taxes other than income taxes, such as payroll, value-added, sales and use, net worth, property and goods and services taxes, in both the United States and foreign jurisdiction. If tax authorities assert that we have taxable nexus in a jurisdiction, they may seek to impose past as well as future tax liability and/or penalties. Any such impositions could also cause significant administrative burdens and decrease our future sales. Moreover, state and federal legislatures have been considering various initiatives that could change our tax position regarding sales and use taxes.

Finally, as we change our international operations, adopt new products and new distribution models, implement changes to our operating structure or undertake intercompany transactions in light of changing tax laws, our tax expense could increase.

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

Our principal offices are located in the San Francisco Bay Area, an area known for earthquakes. We are also vulnerable to damage from other types of disasters, including power loss, fires, explosions, floods, communications failures, terrorist attacks and similar events. If any natural or other disaster were to occur, our ability to operate our business could be impaired.

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

The trading market for our common stock is affected by 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



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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 in turn could cause our share price or trading volume to decline. In addition, our share price and the volatility of our shares can be affected by misinformed or mistaken research reports on our business.

Our common stock price may be affected by third-party data regarding our games.

Third parties publish daily data about us and other mobile gaming companies with respect to downloads of our games, daily and monthly active users and estimated revenue generated by our games. 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 or the revenue generated by our games. 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 common stock may be affected by such third party data and may not reflect the actual performance of our business.

Sales of substantial amounts of our common stock in the public markets, or the perception that such sales might occur, could reduce the price that our common stock might otherwise attain and may dilute your voting power and your ownership interest in us.

The market price of shares of our common stock could decline as a result of substantial sales of our common stock, particularly sales by our directors and their affiliates, executive officers, employees and significant stockholders, under our current shelf registration statements, through a large number of shares of our common stock becoming available for sale, or the perception in the market that holders of a large number of shares intend to sell their shares. For example, Tencent is free to sell the 21,000,000 shares it acquired from us in the second quarter of 2015 on the open-market, subject only to our black-out periods and other limitations under our insider trading policy. In addition, we issued 9,982,886 shares in connection with our acquisition of Cie Games, Inc. in August 2014. We filed a Registration Statement on Form S-3 covering the resale of such shares. Accordingly, the shares issued in the Cie Games acquisition are subject to only limited re-sale restrictions and sales of substantial amounts of such shares may occur.

Some provisions in our certificate of incorporation and bylaws, as well as Delaware law, may deter third parties from seeking to acquire us.

Our certificate of incorporation and bylaws contain provisions that may make the acquisition of our company more difficult without the approval of our board of directors, including the following:

- our board of directors is classified into three classes of directors with staggered three-year terms;
- only our chairman of the board, our lead independent director, our Chief Executive Officer, our president or a majority of our board of directors is authorized to call a special meeting of stockholders;
- our stockholders are able to take action only at a meeting of stockholders and not by written consent;
- only our board of directors and not our stockholders is able to fill vacancies on our board of directors;
- our certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval; and
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before a meeting of stockholders.



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In addition, as a Delaware corporation, we are subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which prevents certain stockholders holding more than 15% of our outstanding common stock from engaging in certain business combinations without approval of the holders of at least two-thirds of our outstanding common stock not held by such 15% or greater stockholder, although our board of directors waived this provision with respect to Tencent's potential acquisition of greater than 15% of our shares in connection with the transaction in which we initially sold shares of our common stock to an affiliate of Tencent.

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 common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We lease our San Francisco, California corporate headquarters, an office building of approximately 29,000 square feet. The San Francisco facility currently accommodates our principal executive, marketing, business development, human resources, finance, legal, information technology and administrative activities, one of our development studios, and other development activities.

We lease additional domestic office space in Burlingame, San Mateo and Long Beach, California; Portland, Oregon; and Bellevue, Washington. We lease offices for our foreign operations in: Toronto, Canada; Hyderabad, India; Moscow, Russia; and Beijing, China. These additional domestic and international facilities primarily accommodate development studios, and customer care activities, and total approximately 160,370 square feet.

We believe our space is adequate for our current needs and that suitable additional or substitute space will be available to accommodate the foreseeable expansion of our operations. See Note 8 of the Notes to Consolidated Financial Statements in Item 8 of this report for more information about our lease commitments.

Item 3. Legal Proceedings

On August 19, 2014, Inventor Holdings, LLC, or IHL, a Delaware limited liability company, filed a complaint in the U.S. District Court for the District of Delaware alleging that we are infringing one of its patents and seeking unspecified damages, including interest, costs, expenses and an accounting of all infringing acts, attorneys' fees and such other costs as the Court deems just and proper. On October 10, 2014, we filed a motion to dismiss the complaint with prejudice on the ground that the patent asserted by IHL claims patent-ineligible subject matter pursuant to 35 U.S.C. § 101 and thus the complaint fails to state a claim upon which relief can be granted. On October 27, 2014, IHL filed an opposition to our motion to dismiss the complaint with prejudice. We filed our reply to IHL's opposition on November 6, 2014. On September 30, 2015, the Court granted our motion to dismiss IHL's complaint. On October 9, 2015, the parties entered a joint stipulation with the Court under which IHL agreed not to appeal the Court's order to dismiss the case and each party agreed to bear its own fees and costs of the litigation.

On November 5, 2014, we filed a complaint against Hothead Games, Inc., or Hothead, in the United States District Court for the Northern District of California alleging that Hothead had willfully infringed certain of our copyrights and trade dress contained in our Deer Hunter 2014 game through Hothead's release of its game, Kill Shot. On August 3, 2015, we entered into a settlement agreement with Hothead resolving our claims against them. Hothead agreed

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to make payments to us, including ongoing payments, and we agreed to allow Hothead to continue to publish the Kill Shot game. We filed a dismissal of the case on August 17, 2015, which the Court granted on August 18, 2015.

In November 2014, Telinit Technologies, LLC, a Texas company, filed a complaint in the U.S. District Court for the Eastern District of Texas, Marshall Division, alleging that we were infringing one of its patents and seeking unspecified damages, attorneys' fees and costs. We settled this dispute in January 2015 for an immaterial amount.

On November 4, 2015, Just Games Interactive LLC (d/b/a Kung Fu Factory, f/k/a Tiny Fun Studios), or Just Games, filed a complaint in the U.S. District Court for the Central District of California against us, Kristen Jenner (f/k/a Kris Kardashian) and additional yet-to-be named defendants. The complaint alleged direct copyright infringement against us and direct and contributory copyright infringement and breach of implied contract against the other defendants. Just Games was seeking at least \$10.0 million in damages as well as other relief, including costs, permanent and temporary injunctive relief, an accounting of profits, a constructive trust and such other costs the Court deemed just and proper. We filed a motion to dismiss the complaint on January 27, 2016. On February 1, 2016, Just Games filed a voluntary motion to dismiss their case against us without prejudice.

From time to time, we are subject to various claims, complaints and legal actions in the normal course of business. We are not currently party to any pending litigation, the outcome of which will have a material adverse effect on our operations, financial position or liquidity. However, the ultimate outcome of any litigation is uncertain and, regardless of outcome, litigation can have an adverse impact on us because of defense costs, potential negative publicity, diversion of management resources and other factors.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information for Common Stock

Our common stock has been listed on The NASDAQ Global Market under the symbol "GLUU" since our initial public offering in March 2007. The following table sets forth, for the periods indicated, the high and low intra-day prices for

our common stock as reported on The NASDAQ Global Market. The closing price of our common stock on February 28, 2017 was \$1.93.

	High	Low
Year ended December 31, 2015		
First quarter	\$ 5.23	\$ 3.36
Second quarter	\$ 6.99	\$ 4.95
Third quarter	\$ 6.47	\$ 4.07
Fourth quarter	\$ 4.43	\$ 2.23
Year ended December 31, 2016		
First quarter	\$ 3.92	\$ 2.01
Second quarter	\$ 3.02	\$ 2.11
Third quarter	\$ 2.86	\$ 2.14
Fourth quarter	\$ 2.36	\$ 1.83

Our stock price has fluctuated and declined significantly since our initial public offering. Please see the Risk Factor – “Our stock price has fluctuated and declined significantly since our initial public offering in March 2007, and may continue to fluctuate, may not rise and may decline further” – in Item 1A of this report.

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Stock Price Performance Graph

The following graph shows a comparison from December 31, 2011 through December 31, 2016 of the cumulative total return for an investment of \$100 (and the reinvestment of dividends) in our common stock, the NASDAQ Composite Index and the NASDAQ Telecommunications Index. Such returns are based on historical results and are not intended to suggest future performance.

The information under the heading “Stock Price Performance Graph” shall not be deemed “soliciting material” or to be “filed” for purposes of Section 18 of the Exchange Act of 1934, and shall not be incorporated by reference into any registration statement or other document filed by us with the SEC, whether made before or after the date of this report, regardless of any general incorporation language in such filing, except as expressly set forth by specific reference in such filing.

Stockholders

As of February 28, 2017, we had approximately 53 record holders of our common stock and thousands of additional beneficial holders.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our Board of Directors.

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

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## Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” Item 8, “Financial Statements and Supplementary Data,” and other financial data included elsewhere in this report. Our historical results of operations are not necessarily indicative of results of operations to be expected for any future period.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(In thousands, except per share amounts)				
Consolidated Statements of Operations Data:					
Revenue	\$ 200,581	\$ 249,900	\$ 223,146	\$ 105,613	\$ 108,183
Cost of revenue:					
Platform commissions, royalties and other	75,239	95,682	80,736	32,371	29,630
Impairment of prepaid royalties and guarantees	30,107	2,502	256	435	-
Impairment and amortization of intangible assets	14,792	9,553	4,767	4,238	3,783
Total cost of revenue	120,138	107,737	85,759	37,044	33,413
Gross profit	80,443	142,163	137,387	68,569	74,770
Operating expenses(1):					
Research and development	81,879	72,856	64,284	46,877	54,275
Sales and marketing	48,050	48,240	45,076	26,120	20,893
General and administrative	30,225	26,092	25,019	15,550	14,744
Amortization of intangible assets	-	201	508	1,336	1,980
Restructuring charge	2,279	1,075	435	1,448	1,371
Impairment of goodwill	-	-	-	-	3,613
Total operating expenses	162,433	148,464	135,322	91,331	96,876
(Loss)/Income from operations	(81,990)	(6,301)	2,065	(22,762)	(22,106)
Interest and other (expense) income, net	(5,751)	(743)	(1,472)	10	(347)
(Loss)/Income before income taxes	(87,741)	(7,044)	593	(22,752)	(22,453)
Income tax benefit (provision)	301	(141)	7,555	2,843	1,994
Net (loss)/income	(87,440)	(7,185)	8,148	(19,909)	(20,459)
Net (loss)/income per share:					

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Basic	\$ (0.66)	\$ (0.06)	\$ 0.09	\$ (0.28)	\$ (0.32)
Diluted	\$ (0.66)	\$ (0.06)	\$ 0.08	\$ (0.28)	\$ (0.32)

Weighted average common shares  
outstanding:

Basic	131,804	118,775	91,826	71,453	64,318
Diluted	131,804	118,775	96,922	71,453	64,318

(1) Includes stock-based compensation expense as follows:

Research and development	\$ 4,567	\$ 3,563	\$ 7,422	\$ 1,948	\$ 3,491
Sales and marketing	1,091	1,082	701	303	386
General and administrative	7,605	7,041	3,510	2,034	1,945

As of December 31,  
2016      2015      2014      2013      2012  
(In thousands)

Cash and cash equivalents and short-term investments	\$ 102,102	\$ 180,542	\$ 70,912	\$ 28,496	\$ 22,325
Total assets	339,504	402,986	251,663	87,011	74,955
Total long-term liabilities	22,350	25,932	3,936	2,357	6,190
Total stockholder's equity	\$ 232,814	\$ 306,428	\$ 171,706	\$ 46,697	\$ 38,887

Please see Note 1, Note 3 and Note 8 of our Notes to Consolidated Financial Statements for a discussion of factors such as impairment of prepaid royalties and guarantees, business combinations and any material uncertainties that may materially affect the comparability of the information reflected in selected financial data, described in Item 6 of this report.

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Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included in Item 8, "Financial Statements and Supplementary Data" of this report. In addition to our historical consolidated financial information, the following discussion contains forward-looking statements that reflect our plans, estimates, and beliefs. Our actual results and the timing of certain events could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and elsewhere in this report, particularly in Item 1A, "Risk Factors."

Our Management's Discussion and Analysis of Financial Condition and Results of Operations, or MD&A, includes the following sections:

- An Overview that discusses at a high level our operating results and some of the trends that affect our business;
- Critical Accounting Policies and Estimates that we believe are important to understanding the assumptions and judgments underlying our financial statements;
- Recent Accounting Pronouncements;
- Results of Operations, including a more detailed discussion of our revenue and expenses; and
- Liquidity and Capital Resources, which discusses key aspects of our statements of cash flows, changes in our balance sheets and our financial commitments.

Overview

This overview provides a high-level discussion of our operating results and some of the trends that affect our business. We believe that an understanding of these trends is important to understanding our financial results for fiscal 2016, as well as our future prospects. This summary is not intended to be exhaustive, nor is it intended to be a substitute for the detailed discussion and analysis provided elsewhere in this report, including our consolidated financial statements and accompanying notes.

## Financial Results and Trends

Revenue for 2016 was \$200.6 million, a 19.7% decrease compared to 2015, in which we reported revenue of \$249.9 million. The decrease in total revenue was primarily related to a \$43.7 million decrease in our revenue from micro-transactions (in-app purchases) and a \$5.7 million decrease in our revenue from advertisements and offers. The decrease was primarily related to declining revenue on a year-over-year basis from catalog titles such as Kim Kardashian: Hollywood, Racing Rivals, Deer Hunter 2014 and Contract Killer: Sniper and our inability to fully replace such declining revenue with revenue from new title launches, such as Katy Perry Pop, Kendall & Kylie, Britney Spears: American Dream, and Nicki Minaj: The Empire, which have not generated enough revenue or retained users at the rates necessary to offset the declining catalog revenue.

Revenue for 2015 was \$249.9 million, a 12.0% increase compared to 2014, in which we reported revenue of \$223.1 million. The increase in total revenue was primarily related to a \$26.1 million increase in our revenue from micro-transactions (in-app purchases) and a \$1.9 million increase in our revenue from advertisements and offers. These increases were partially offset by a \$1.2 million decrease in premium and feature phone revenue due to the continued migration of users from feature phones to smartphone devices and our decision to concentrate our product development efforts exclusively towards developing new free-to-play titles for smartphones, tablets and other next-generation platforms.

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We have concentrated our product development efforts towards developing games for smartphone and tablet devices. We generate the majority of our revenue from Apple's iOS platform, which accounted for 62.4%, 60.5%, and 61.8% of our total revenue for the years ended December 31, 2016, 2015, and 2014, respectively. We generated the majority of this iOS-related revenue through the Apple App Store, which represented 52.7%, 51.7%, and 52.2% of our total revenue for the years ended December 31, 2016, 2015, and 2014, respectively, with the significant majority of such revenue derived from in-app purchases. We generated the balance of our iOS-related revenue from offers and advertisements in games distributed on the Apple App Store. In addition, we generated approximately 36.1%, 38.1%, and 35.4% of our total revenue for the years ended December 31, 2016, 2015, and 2014, respectively, from the Android platform. We generated the majority of our Android-related revenue through the Google Play Store, which represented 27.6%, 27.4%, 24.8% of our total revenue for the years ended December 31, 2016, 2015, and 2014, respectively, with the significant majority of such revenue derived from in-app purchases. We generated the balance of our Android-related revenue from other platforms that distribute apps that run the Android operating system (e.g., the Amazon App Store) and through offers and advertisements in games distributed through the Google Play Store and other Android platforms.

We currently publish titles in five genres: fashion and celebrity, sports and action, food, home and social networking. We believe these are genres in which we have already established a leadership position, are otherwise aligned with our strengths or are conducive to the establishment of a strong platform. Platforms are titles that we continue to update with additional content and features and which grow revenue year over year. Evergreen titles are similar to platforms in that we continue to update them with additional content and features, but differ from platforms in that our focus is to reduce and potentially reverse their year over year revenue declines; to the extent that we succeed in our efforts to grow annual revenue from an evergreen title, we would then consider such evergreen title to be a platform.

We established our leadership in the fashion and celebrity gaming genre when we launched Kim Kardashian: Hollywood in June 2014, and extended our leadership position through our acquisition of Crowdstar in November 2016 and its successful Covet Fashion title. Our leadership in the sports and action category remains strong with our Tap Sports Baseball, Racing Rivals and Deer Hunter franchises, and we hope to expand that leadership in 2017 with the launch of MLB Tap Sports Baseball 2017 which will include licensed content from Major League Baseball, or MLB, for the first time together with current and former MLB players pursuant to our continuing agreements with the Major League Baseball Players Association, or MLBPA, and Major League Baseball Players Alumni Association, or MLBPA. The food genre includes our Cooking Dash and Diner Dash franchises, and our leadership position in this genre was bolstered by our successful release of Gordon Ramsay DASH in June 2016. We established our leadership position in the home genre with our release of Design Home in November 2016, which was the first title launched by Crowdstar following the acquisition. Our social networking genre includes QuizUp, a title we acquired in our purchase of substantially all of the assets of Plain Vanilla Corp.

We believe that our games consistently have high production values, are visually appealing and have engaging core gameplay. These characteristics have typically helped to drive installs and awareness of our games and resulted in highly positive consumer reviews. The majority of our games have been featured on Apple and Google storefronts when they were commercially released, which we believe is the result of us being a good partner of Apple and Google.

We work closely with our celebrity and brand licensors to engage their social media audiences and build games that will resonate with their unique fan bases. For example, our celebrity games utilize transmedia storytelling, leveraging the celebrity's built-in social media fan base to drive installs and awareness of the game, and then attempting to surprise and delight those fans with real-world events and other game content based on the celebrity's life. Our goal is for the game content to become entwined with the celebrity's persona and social media presence, and to otherwise enhance interaction with the celebrity's fans. We also leverage the strength of well known brands and licensors to provide users with more realistic experiences, such as the case with our forthcoming title MLB Tap Sports Baseball 2017 which will feature all MLB clubs and uniforms and current and former MLB players. We also plan to work to build and nurture social communities in and around the games themselves, creating a new vehicle for strong, personal engagement with the brand or celebrity's fan base. In order to capitalize on the impact of our brand and celebrity licensors, we need to differentiate each game we release and space out our launch dates in order to avoid cannibalization of revenue from our existing games and to ensure that each game resonates with our players. While we believe our strategy has proven to be

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successful in certain areas, we have not experienced the level of success with Katy Perry Pop, Kendall & Kylie, Britney Spears: American Dream and Nicki Minaj: The Empire that we experienced with Kim Kardashian: Hollywood, which has necessitated impairments to certain contractual minimum guarantee payments made to certain of our celebrity licensors during 2016. We will need to continue our efforts to differentiate and provide innovative features in our future celebrity based titles, including user generated content and social features, if we are to succeed in our strategy.

For us to continue driving installs and awareness of our games and to improve monetization and retention of our players, we must ensure that each of our games, whether in development or already live, has compelling gameplay and a core monetization loop that incentivizes players to make in-app purchases. In addition, we must regularly update our games with compelling new content, deliver socio-competitive features like tournaments, contests, player-versus-player gameplay and live events and build and nurture social media communities around our franchises both in-game and holistically via community features such as dedicated social channels. We have also made significant investments in our proprietary analytics and monetization infrastructure. With our enhanced analytics capabilities, we intend to devote resources towards segmenting and learning more about the players of each of our franchises and further monetizing our highest spending and most engaged players. We aim to connect our analytics and monetization infrastructure to every element of our business – from marketing to merchandising – in order to improve player retention and monetization.

We also plan to continue monitoring the successful aspects of our games to drive downloads and enhance monetization and retention as part of our platform strategy, whether by optimizing advertising revenue within each title, securing additional compelling licensing arrangements, building enhanced and more complex core gameplay, adding additional social features, tournaments and events, offering subscriptions for in game durables and consumables to players or otherwise. Optimizing advertising revenue within our games requires us to continue taking advantage of positive trends in the mobile advertising space, particularly as brands continue to migrate budgets from web to mobile. Continuing to drive installs and awareness of our games through licensing efforts requires that we continue to partner with celebrities, social influencers, organizations and brands that resonate with potential players of our games. Partnering with desirable licensing partners and renewing our existing licenses with our most successful partners requires that we continue to develop successful games based on licensed content and are able to compete with other mobile gaming companies on financial and other terms in signing such partners. We also plan to continue introducing third-party licensed brands, properties and personalities into our games as additional licensed content, for cameo appearances or for limited time events in order to drive awareness and monetization.

Across the globe our industry is evidencing that hit titles generally remain higher in the top grossing charts for longer. We believe this is due to the continued specialization and investment of teams and companies in their hit titles, and the live, social nature of certain games. Our strategy and the measures we have implemented during the past year to support our business position us to take advantage of these trends, as evidenced by the continued strength of our Kim Kardashian: Hollywood, Cooking Dash 2016 and Tap Sports Baseball 2016 titles. We plan to focus on regularly updating and otherwise supporting our platform and evergreen titles in order to ensure that those games monetize and retain users for even longer periods of time and to drive a larger part of our aggregate revenue from our existing titles. In addition, we plan to continue to invest in our creative leaders and the creative environments in which

they and their teams work to increase our likelihood of creating significant hit platform titles in 2017 and beyond.

Our net loss in the year ended December 31, 2016 was \$87.4 million versus net loss of \$7.2 million in the year ended December 31, 2015. This substantial increase was primarily due to an a decrease in revenue of \$49.3 million, an increase in cost of revenue of \$12.4 million, primarily attributable to \$20.2 million in royalty impairments related to certain contractual minimum guarantee payments made to certain of our celebrity licensors and other prepaid royalties and \$14.5 million in royalty impairment related to the prepaid guaranteed royalty and license fee payments that we have made to an affiliate of Tencent related to our Rival Fire game, an increase in operating expenses of \$14.0 million, and a net increase in interest and other expenses of \$5.0 million, primarily attributable to a \$1.9 million charge related to the change in fair value of our investment in promissory notes issued to us by Plain Vanilla, and a \$2.4 million impairment charge related to the call option for Plain Vanilla, See “—Results of Operations—Comparison of the Years Ended December 31, 2016 and 2015” below for further details. Our operating results were also affected by fluctuations in foreign currency exchange rates of the currencies in which we incurred meaningful operating expenses (principally the British Pound Sterling, Euro, Chinese Renminbi, Russian Ruble, and Indian Rupee), and our customers’ reporting currencies,



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which fluctuated significantly in 2015 and 2016.

Our net loss in the year ended December 31, 2015 was \$7.2 million versus net income of \$8.1 million in the year ended December 31, 2014. This change was primarily due to an increase in cost of revenue of \$22.0 million, a decrease in income tax benefit of \$7.7 million related to the release of a portion of our valuation allowance resulting from our acquisition of Cie Games the prior year, and an increase in operating expenses of \$13.1 million. These unfavorable factors were partially offset by an increase in revenue of \$26.8 million. See “—Results of Operations—Comparison of the Years Ended December 31, 2015 and 2014” below for further details. Our operating results were also affected by fluctuations in foreign currency exchange rates of the currencies in which we incurred meaningful operating expenses (principally the British Pound Sterling, Euro, Chinese Renminbi, Russian Ruble, and Indian Rupee), and our customers’ reporting currencies, which fluctuated significantly in 2014 and 2015.

Our ability to achieve and sustain profitability depends not only on our ability to grow our revenue, but also on our ability to manage our operating expenses. The largest component of our recurring expenses is personnel costs, which consist of salaries, benefits and incentive compensation, including bonuses and stock-based compensation. We have conducted several restructurings since December 2015, including most recently in January 2017, reducing our headcount by more than 100 personnel. However, we expect our personnel costs to increase in 2017, primarily due to our acquisition of Crowdstar in the fourth quarter of 2016 and our plans to bolster our studios by continuing to hire additional development personnel in the San Francisco Bay Area and Hyderabad, India, including additional proven creative leaders.

Cash and cash equivalents at December 31, 2016 totaled \$102.1 million, a decrease of \$78.4 million from the \$180.5 million balance at December 31, 2015. This decrease was primarily due to \$51.5 million of cash used in investing activities related to our acquisition of Crowdstar, investments in Plain Vanilla Corp. and Dairy Free Games, Inc., purchases of intangible assets, and purchases of property and equipment. In addition, we used \$19.8 million of net cash in operations, which was primarily related to a \$16.7 million increase in prepaid royalties associated with minimum guaranteed royalty payments made to our celebrity and other licensors and used \$6.8 million of cash in financing activities, primarily related to \$4.7 million paid to acquire non-controlling interest in Crowdstar.

## Key Operating Metrics

We manage our business by tracking various non-financial operating metrics that give us insight into user behavior in our games. The three metrics that we use most frequently are Daily Active Users (DAU), Monthly Active Users (MAU), and Average Revenue Per Daily Active User (ARPDau). Our methodology for calculating DAU, MAU, and ARPDau may differ from the methodology used by other companies to calculate similar metrics.

DAU is the number of individuals who played a particular smartphone game on a particular day. An individual who plays two different games on the same day is counted as two active users for that day when we aggregate DAU across games. In addition, an individual who plays the same game on two different devices during the same day (e.g., an iPhone and an iPad) is also counted as two active users for each such day when we average or aggregate DAU over time. Average DAU for a particular period is the average of the DAUs for each day during that period. We use DAU as a measure of player engagement with the titles that our players have downloaded.

MAU is the number of individuals who played a particular smartphone game in the month for which we are calculating the metric. An individual who plays two different games in the same month is counted as two active users for that month when we aggregate MAU across games. In addition, an individual who plays the same game on two different devices during the same month (e.g., an iPhone and an iPad) is also counted as two active users for each such month when we average or aggregate MAU over time. Average MAU for a particular period is the average of the MAUs for each month during that period. We use the ratio between DAU and MAU as a measure of player retention.

ARPDau is total free-to-play smartphone revenue – consisting of micro-transactions, advertisements and offers – for the measurement period divided by the number of days in the measurement period divided by the DAU for the measurement period. ARPDau reflects game monetization. Under our revenue recognition policy, we recognize this revenue over the estimated average playing period of a user, but our methodology for calculating our DAU does not align

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with our revenue recognition policy for micro-transactions and offers, under which we defer revenue. For example, if a title is introduced in the last month of a quarter, we defer a substantial portion of the micro-transaction and offer revenue to future months, but the entire DAU for the newly released title is included in the month of launch.

In addition, we also analyze social followers when determining which celebrities we might wish to partner with in developing games. Our social followers metric represents the aggregate number of individuals who follow our celebrity licensors on social media platforms (as reported by such platforms). We calculate the aggregate number of social followers of a particular celebrity by adding the total followers of such celebrity on Facebook, Twitter, Instagram, and Vevo. There is fan overlap among these social channels and among our various celebrity licensors, and such aggregate numbers have not been deduplicated. We use the number of social followers as a measure of the potential reach and engagement a particular celebrity may have with players of our games.

We calculate DAU, MAU and ARPDau for only our primary distribution platforms, such as Apple's App Store, the Google Play Store, Amazon's Appstore and the Mac App Store; we are not able to calculate these metrics across all of our distribution channels. In addition, the platforms that we include for purposes of this calculation have changed over time, and we expect that they will continue to change as our business evolves, but we do not expect that we will adjust prior metrics to take any such additions or deletions of distribution platforms into account. We believe that calculating these metrics for only our primary distribution platforms at a given period is generally representative of the metrics for all of our distribution platforms. Moreover, we rely on the data analytics software that we incorporate into our games to calculate and report the DAU, MAU and ARPDau of our games, and we make certain adjustments to the analytics data to address inconsistencies between the information as reported and our DAU and MAU calculation methodology.

We have estimated the DAU and MAU for certain older titles because the analytics tools incorporated into those titles are incompatible with newer device operating systems (e.g., iOS 10), preventing us from collecting complete data. For these titles, we estimate DAU and MAU by extrapolating from each affected title's historical data in light of the behavior of similar titles for which complete data is available. The table below sets forth our aggregate DAU, MAU and ARPDau for all of our then-active smartphone titles for the periods specified, followed by a qualitative discussion of the changes in these metrics. Aggregate DAU and MAU include users of both our free-to-play and premium titles, whereas aggregate ARPDau is calculated based only on revenue from our free-to-play games. Aggregate DAU and MAU for each period presented represents the aggregate metric for the last month of the period. For example, DAU for the three months ended December 31, 2015 is aggregate daily DAU for the month of December 2015 calculated for all active smartphone free-to-play and premium titles in that month across the distribution platforms for which we calculate the metric.

Three Months Ended

2016

2015

March 31    June 30    September 30    December 31    March 31    June 30    September 30    December 31  
(In thousands, except aggregate ARPDau)

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Aggregate DAU	4,935	4,126	3,476	4,418	5,986	6,107	5,490	5,085
Aggregate MAU	42,391	35,830	29,591	35,861	54,065	59,565	52,982	49,421
Aggregate ARPDau	\$ 0.12	\$ 0.14	\$ 0.16	\$ 0.14	\$ 0.13	\$ 0.10	\$ 0.12	\$ 0.13

The decrease in aggregate DAU and MAU for the three months ended December 31, 2016 as compared to the same period of the prior year was primarily related to fewer downloads of our new title launches in the fourth quarter of 2016 as compared to the fourth quarter of 2015 and lower retention of users for existing titles, particularly for our Kim Kardashian: Hollywood, Racing Rivals and Deer Hunter 2016 titles. Our aggregate ARPDau increased for the three months ended December 31, 2016 as compared to the same period of the prior year, as we improved monetization on certain titles, particularly through increased use of social features in those games. Future increases in our aggregate DAU, MAU and ARPDau will depend on our ability to retain current players, attract new paying players, launch new games and expand into new markets and distribution platforms.

We rely on a very small portion of our total users for nearly all of our revenue derived from in-app purchases. Since the launch of our first free-to-play titles in the fourth quarter of 2010, the percentage of unique paying users for our largest revenue-generating free-to-play games has typically been less than 2%, when measured as the number of unique

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paying users on a given day divided by the number of unique users on that day, though this percentage fluctuates, and it may be higher than 2% for certain of our games during specific, relatively short time periods, such as immediately following worldwide launch or the week following content updates, marketing campaigns or certain other events.

## Significant Transactions

### Plain Vanilla Corp. Acquisition

In January 2016, we announced an investment of up to \$7.5 million in promissory notes convertible into a minority equity stake in Plain Vanilla of which \$5.0 million was paid in January 2016 and the remaining \$2.5 million was paid in May 2016. As part of the investment, we also received a call option to acquire all outstanding equity of Plain Vanilla for 15 months from the closing of the initial investment, unless earlier terminated by the Company, at a pre-agreed price. Plain Vanilla is the Icelandic developer of the mobile game QuizUp.

On December 19, 2016, we acquired substantially all of the intangible assets and certain other assets of Plain Vanilla, including all rights to QuizUp and approximately \$1.2 million in cash. In exchange, we agreed to forgive and cancel \$7.5 million in aggregate principal amount of convertible promissory notes of Plain Vanilla held by us, and all interest thereon, with \$2.5 million in aggregate principal amount of the notes forgiven and cancelled at the closing of the acquisition. The remaining \$5.0 million in aggregate principal amount of the notes and all outstanding interest thereon is expected to be forgiven and cancelled on March 31, 2017.

### Crowdstar Acquisition

On November 2, 2016, we, through a wholly owned subsidiary, acquired shares representing approximately 80.6% of the issued and outstanding voting power of Crowdstar, for consideration of approximately \$40.8 million in cash pursuant to a transfer agreement by and among us, Crowdstar and certain stockholders of Crowdstar. Crowdstar, which is based in Burlingame, California, employs approximately 90 people and develops fashion and home decor genre games for mobile devices.

Following the initial acquisition of shares of Crowdstar by us, we exercised the right, as the holder of a majority of each of the preferred stock and the capital stock of Crowdstar, to appoint each of the five members of the board of directors of Crowdstar. In addition, certain drag-along provisions specified in a voting agreement by and among Crowdstar and certain stockholders of Crowdstar were triggered. Pursuant to the drag-along provisions, certain other

stockholders of Crowdstar were required to tender their Crowdstar capital stock to us on the same terms as those specified in the transfer agreement.

On December 6, 2016, we acquired the remaining issued and outstanding shares of Crowdstar pursuant to a short-form merger and now have 100% ownership of Crowdstar. We paid an aggregate of approximately \$45.5 million of cash (\$40.8 million for the initial purchase of shares and an aggregate of \$4.7 million in connection with purchasing shares in connection with exercising the drag-along provisions and effecting the short-form merger) to acquire 100% ownership of Crowdstar.

Our first title created by Crowdstar, Design Home, was released in November 2016.

#### Tencent Investment

On April 29, 2015, we entered into a Purchase Agreement with Tencent and Tencent's controlled affiliate, Red River, pursuant to which we issued to Red River an aggregate of 21,000,000 shares of our common stock at a purchase price of \$6.00 per share, for aggregate net proceeds of \$125.2 million, after offering expenses. We issued 12,500,000 of these shares to Red River on April 29, 2015 and issued the remaining 8,500,000 shares at a second closing on June 3, 2015.

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### Acquisition of Cie Games

On August 20, 2014, we completed the acquisition of Cie Games, Inc., or Cie Games, a developer of racing genre mobile games based in Long Beach, California. We acquired Cie Games to leverage its racing genre expertise, assembled workforce and existing mobile games in order to expand our game offerings. The purchase price consideration included 9,982,886 shares of our common stock valued at \$5.09 per share as of the closing date of the acquisition, for an aggregate of \$50.8 million in share consideration. In addition, we agreed to pay approximately \$29.5 million in cash consideration, of which \$1.9 million was paid during the year ended December 31, 2015, for total overall consideration paid of \$80.3 million. In March 2016, we released the 2,139,190 shares that were heldback for 18 months and 30 days from the closing of the acquisition to satisfy potential indemnification claims under the merger agreement for the acquisition. All outstanding Cie Games capital stock and stock options were cancelled at the closing of the acquisition.

### Acquisition of PlayFirst

On May 14, 2014, we completed the acquisition of PlayFirst, a developer of casual games for smartphones and tablets based in San Francisco, California.

The purchase price consideration was \$11.6 million, representing 2,954,659 shares of our common stock valued at \$3.91 per share as of the closing date of the acquisition. The number of shares comprising the purchase price consideration was reduced from 3,000,000 shares to 2,954,659 shares due to a working capital adjustment. In addition, we withheld approximately 106,000 shares to cover stockholders' agent expenses and tax obligations of certain PlayFirst stockholders, which resulted in us issuing a total of 2,849,276 shares in the acquisition valued at \$11.1 million and paying \$412,000 of cash. In July 2016, we released all 1,500,000 shares that were held in escrow for 24 months and 60 days from the closing date to satisfy potential indemnification claims under the PlayFirst merger agreement. In addition, we assumed approximately \$3.5 million of PlayFirst net liabilities.

During the third quarter of 2014, we and the stockholders' agent under the merger agreement agreed that we were entitled to retain approximately 24,000 shares from the holdback due to a working capital adjustment, and an adjustment of \$93,000 was made to goodwill representing the fair value of the shares on the date of acquisition. All outstanding PlayFirst capital stock, stock options and warrants were cancelled at the closing of the acquisition. Our first title created by PlayFirst, Diner Dash, was released in the fourth quarter of 2014, Cooking Dash 2016 was released in June 2015 and Gordon Ramsay DASH was released in June 2016.

### Related Party Transaction

In November 2015, we entered into an agreement with an affiliate of Tencent pursuant to which we agreed, subject to certain conditions, to pay in the aggregate, up to \$15.0 million in recoupable advanced royalties and non-recoupable license fees. As of December 31, 2016, we had paid the full amount of \$15.0 million, as all payment milestones were achieved.

During the year ended December 31, 2016, we recorded an impairment of approximately \$14.5 million for un-recouped advanced royalties and non-recoupable license fees that were paid to an affiliate of Tencent, due to the underperformance of the our Rival Fire title which launched during the third quarter of 2016 and the negligible cash flows anticipated for the remaining contractual life of these assets.

#### Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with United States generally accepted accounting principles, or GAAP. These accounting principles require us to make certain estimates and judgments that can affect the reported amounts of assets and liabilities as of the dates of the consolidated financial statements, the disclosure of contingencies as of the dates of the consolidated financial statements, and the reported amounts of revenue and expenses during the periods presented. Although we believe that our estimates and judgments are reasonable under the circumstances existing at the time these estimates and judgments are made, actual results may differ from those estimates,



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which could affect our consolidated financial statements.

We believe the following to be critical accounting policies because they are important to the portrayal of our financial condition or results of operations and they require critical management estimates and judgments about matters that are uncertain:

- revenue recognition;
- variable interest entities;
- prepaid or guaranteed licensor royalties;
- business combinations – purchase accounting;
- goodwill;
- stock-based compensation; and
- income taxes.

## Revenue Recognition

We generate revenue through in-app purchases, advertising and other offers within our games on smartphones and tablets, such as Apple's iPhone and iPad and other mobile devices utilizing Google's Android operating system. Smartphone games are distributed primarily through digital storefronts, such as the Apple App Store and the Google Play Store. We also generate some revenue from sales of legacy feature phone games distributed primarily through wireless carriers.

## Revenue

We distribute our games for smartphones and tablets to end customers through digital storefronts such as Apple's App Store and the Google Play Store. Within these storefronts, users can download our free-to-play games and pay to acquire virtual currency which is redeemed in the game for virtual goods. We recognize revenue when persuasive evidence of an arrangement exists, the service has been provided to the user, the price paid by the user is fixed or determinable, and collectability is reasonably assured. Determining whether and when some of these criteria have been satisfied requires judgments that may have a significant impact on the timing and amount of revenue we report in each period. For the purpose of determining when the service has been provided to the player, we have determined that an implied obligation exists to the paying user to continue displaying the purchased virtual goods within the game over the estimated average playing period of paying players for the game, which represents our best estimate of the estimated average life of virtual goods.

We sell both consumable and durable virtual goods, and we receive reports from digital storefronts which breakdown the various purchases made in our games for a given time period. We review these reports and determine on a per-item basis whether the purchase was a consumable virtual good or a durable virtual good. Consumable goods are items consumed at a predetermined time or otherwise have limitations on repeated use, while durable goods are items that remain in the game for as long as the player continues to play. Our revenue from consumable virtual goods have been insignificant since we launched our first free-to-play title in the fourth quarter of 2010. We recognize revenue from the sale of durable virtual goods, such as virtual currency and other virtual items, ratably over the estimated average playing period of paying users, which has generally been in the range of three to seven months. If a new game is launched and only a limited period of paying player data is available, then we also consider other qualitative factors, such as the playing patterns for paying users for other games with similar characteristics.

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We compute our estimated average playing period of paying users at least twice each year, and more frequently if qualitative evidence exists that would indicate a possible change in estimated average playing life, including consideration of changes in the characteristics of games. We have examined the playing patterns of paying users across a representative sample of our games across various genres. To compute the estimated average playing period for paying users, we group the daily populations of paying players, or the daily cohort, from the date of their first installation of the game and track each daily cohort to understand the number of players from each daily cohort who played the game after their initial purchase. For titles with a year or more of data, we compute a weighted average playing period for paying users using this dataset. For titles with less than a year of data, or new titles, we use a linear interpolation model to estimate the average playing period of paying users. The measured average playing periods of games with at least one year of player data are mapped against the retention percentages of those same games at 150 days, generating a linear interpolation curve. The 150 day retention rate of a new title is then inputted into that curve to estimate an average playing period for that new title. Ninety day retention rates are used for new titles that do not have 150 days of data to interpolate their respective average playing period. We then compute a revenue-based weighted average of the estimated playing period across all of the games in the sample to arrive at the overall weighted average playing period of paying users.

We apply this weighted average playing period for all paying users to a majority of our games because the computed weighted average playing period for each game is generally consistent across the games analyzed. For titles with greater than two years of data and that generate meaningful revenue, we use a second calculation model in which the average lifespan of users from their install date to last date of play is measured. This model is effective for titles with enough historical data to reasonably estimate the useful life in this manner. The average lifespan model is not appropriate for titles that have been played for less than two years, as that timespan is insufficient to estimate the average lifespan of users using actual and not forecasted data. While we believe our estimates to be reasonable based on available game player information, we may revise such estimates in the future as the games' operation periods change. Any adjustments arising from changes in the estimates of the lives of these virtual goods would be applied to the current quarter and prospectively on the basis that such changes are caused by new information indicating a change in game player behavior patterns compared to historical titles. Any changes in our estimates of useful lives of these virtual goods may result in revenue being recognized on a basis different from prior periods' and may cause our operating results to fluctuate.

We also have relationships with certain advertising service providers for advertisements within our smartphone games and revenue from these advertising providers is generated through impressions, click-throughs, banner ads and offers. Revenue is recognized as advertisements are delivered and reported to us, an executed contract exists, the price is fixed or determinable and collectability has been reasonably assured. Delivery generally occurs when the advertisement has been displayed or the offer has been completed by the user. The fee received for certain offer advertisements that result in the user receiving virtual currency for redemption within a game are deferred and recognized over the average playing period of paying users.

## Other Estimates and Judgments

We estimate revenue from digital storefronts and advertising networks in the current period when reasonable estimates of these amounts can be made. Certain digital storefronts and advertising service providers provide reliable interim preliminary reporting and others report sales data within a reasonable time frame following the end of each month, both of which allow us to make reasonable estimates of revenue and therefore to recognize revenue during the reporting period. Determination of the appropriate amount of revenue recognized involves judgments and estimates that we believe are reasonable, but it is possible that actual results may differ from our estimates. When we receive the final reports, to the extent not received within a reasonable time frame following the end of each month, we record any differences between estimated revenue and actual revenue in the reporting period. Historically, the revenue on the final revenue report have not differed significantly from the reported revenue for the period.

#### Principal Agent Considerations

In accordance with the Accounting Standards Codification (ASC) 605-45, Revenue Recognition: Principal Agent Considerations, we evaluate our digital storefront and advertising service provider agreements in order to determine

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whether or not we are acting as the principal or as an agent when selling our games or when selling advertisements within our games, which we consider in determining if revenue should be reported gross or net. We primarily use digital storefronts for distributing our smartphone games and advertising service providers for distributing advertisements within our games. Key indicators that we evaluate in order to reach this determination include:

- the terms and conditions of our contracts with the digital storefronts and advertising service providers;
- the party responsible for billing and collecting fees from the end-users, including the resolution of billing disputes;
- whether we are paid a fixed percentage of the arrangement's consideration or a fixed fee for each game, transaction, or advertisement;
- the party which sets the pricing with the end-user, has the credit risk and provides customer support; and
- the party responsible for the fulfillment of the game or serving of advertisement and that determines the specifications of the game or advertisement.

Based on the evaluation of the above indicators, we have determined that we are generally acting as a principal and are the primary obligor to end-users for smartphone games distributed through digital storefronts and advertisements served through our advertising service providers. Therefore, we recognize revenue related to these arrangements on a gross basis, when the necessary information about the gross amounts or platform fees charged, before any adjustments, are made available to us by the digital storefronts and advertising service providers.

## Variable Interest Entities

We have interests in other entities that are variable interest entities, or VIEs. Our assessment of whether we are the primary beneficiary of our VIEs requires significant assumptions and judgment. Determining whether to consolidate a VIE requires judgment in assessing (i) whether an entity is a VIE and (ii) if we are the entity's primary beneficiary and thus required to consolidate the entity. To determine if we are the primary beneficiary of a VIE, we evaluate whether we have (i) the power to direct the activities that most significantly impact the VIE's economic performance and (ii) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. Our evaluation includes identification of significant activities and an assessment of our ability to direct those activities based on governance provisions and other applicable agreements and circumstances.

## Prepaid or Guaranteed Licensor Royalties

Our royalty expenses consist of fees that we pay to content owners for the use of their brands, properties and other licensed content, including trademarks and copyrights, in the development of our games. Royalty-based obligations are either paid in advance and capitalized on the balance sheet as prepaid royalties or accrued as incurred and subsequently paid. These royalty-based obligations are expensed to cost of revenue at the greater of the revenue derived from the relevant game multiplied by the applicable contractual rate or an effective royalty rate based on expected net product sales.

Our contracts with certain licensors include minimum guaranteed royalty payments, which are payable regardless of the ultimate volume of sales to end users, in accordance with ASC 440-10, Commitments, or ASC 440. When no significant performance remains with the licensor, we initially record each of these guarantees as an asset and as a liability at the contractual amount. We believe that the contractual amount represents the fair value of the liability. When significant performance remains with the licensor, we record royalty payments as an asset when actually paid and as a liability when incurred, rather than upon execution of the contract. The classification of minimum royalty payment obligations between long-term and short-term is determined based on the expected timing of recoupment of earned royalties calculated on projected revenue for the games that include content licensed from third parties.

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Each quarter, we evaluate the realization of our prepaid and guaranteed royalties as well as any unrecognized guarantees not yet paid to determine amounts that we deem unlikely to be realized through product sales. We use estimates of undiscounted revenue and net margins to evaluate the future realization of prepaid royalties, license fees, and guarantees. This evaluation is performed at the title level and considers multiple factors, such as, the term of the agreement, forecasted demand, game life cycle status, game development plans, level of social media activity, and current and anticipated sales levels, as well as other qualitative factors such as the success of similar games and similar genres on mobile devices published by us and our competitors and/or other game platforms (e.g., consoles and personal computers) utilizing the intellectual property. To the extent that this evaluation indicates that the remaining prepaid and guaranteed royalty payments are not recoverable, we record an impairment charge to cost of revenue in the period that impairment is indicated.

### Business Combinations — Purchase Accounting

We apply ASC 805, Business Combinations, or ASC 805, which is the accounting guidance related to business combinations. The standard requires recognition of assets acquired, liabilities assumed, and contingent consideration at their fair value on the acquisition date with subsequent changes recognized in earnings; requires acquisition-related expenses and restructuring costs to be recognized separately from the business combination and expensed as incurred; requires in-process research and development to be capitalized at fair value as an indefinite-lived intangible asset until completion or abandonment; and requires that changes in accounting for deferred tax asset valuation allowances and acquired income tax uncertainties after the measurement period be recognized as a component of provision for taxes.

We account for acquisitions of entities that include inputs and processes and have the ability to create outputs as business combinations. The purchase price of the acquisition is allocated to tangible assets, liabilities, and identifiable intangible assets acquired based on their estimated fair values. The excess of the purchase price over those fair values is recorded as goodwill. Acquisition-related expenses and restructuring costs are expensed as incurred. While we use our best estimates and assumptions as a part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business combination date, these estimates and assumptions are inherently uncertain and subject to refinement. Our key assumptions used have included projected revenue, cost of goods sold, and operating expenses for our acquired entities, the future amortization tax benefit of legacy titles, and discount rates. As a result, during the preliminary purchase price allocation period, which may be up to one year from the business combination date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. After the preliminary purchase price allocation period, we record adjustments to assets acquired or liabilities assumed subsequent to the purchase price allocation period in our operating results in the period in which the adjustments were determined.

### Goodwill

In accordance with ASC 350, Intangibles – Goodwill and Other, or ASC 350, we do not amortize goodwill or other intangible assets with indefinite lives but rather test them for impairment. ASC 350 requires us to perform an impairment review of our goodwill balance at least annually, which we do as of September 30th each year, and also whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable.

We evaluate qualitative factors and overall financial performance to determine whether it is necessary to perform the first step of the two-step goodwill test. This step is referred to as “Step 0.” Step 0 involves, among other qualitative factors, weighing the relative impact of factors that are specific to the reporting unit as well as industry and macroeconomic factors. After assessing those various factors, if it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the entity will need to proceed to the first step of the two-step goodwill impairment test. ASC 350 requires a multiple-step approach to testing goodwill for impairment for each reporting unit annually, or whenever events or changes in circumstances indicate the fair value of a reporting unit is below its carrying amount. The first step measures for impairment by applying the fair value-based tests at the reporting unit level. The second step (if necessary) measures the amount of impairment by applying the fair value-based tests to individual assets and liabilities within each reporting unit. The fair value of the reporting units is estimated using a combination of the market approach, which utilizes comparable companies’ data, and/or the income approach, which uses discounted cash flows.



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We performed our annual goodwill impairment assessment as of September 30, 2016 and determined a Step 1 analysis was necessary due to a significant decline in our market capitalization and the significant impairment of prepaid royalties recorded during the three months ended September 30, 2016. Based on the results of the Step 1 analysis, we concluded that the fair value of the reporting unit was greater than the carrying value of the reporting unit based on a methodology that utilized both an income approach and a market approach. The income approach was based on projected future (debt-free) cash flows that were discounted to present value. For the market approach, we used both the guideline company and similar transaction methods. The guideline company method analyzed market multiples of bookings for a group of comparable public companies. Under the similar transactions method, valuation multiples were calculated utilizing actual transaction prices and revenue/EBITDA data from target companies deemed similar to us.

The revenue and profitability forecasts used in valuation considered recent performance and trends, strategic initiatives and relevant industry trends. Assumptions used in the valuation were similar to those that would be used by market participants performing independent valuations of similar businesses.

Key assumptions used in the quantitative analysis included:

- 4% long-term revenue growth rate and the Gordon Growth model to calculate the terminal value;
- A gradual return to historical profitability rates over the remaining forecast period;
- Royalty rates based on active license agreements of the brand; and
- A market-based discount rate of 12% which takes into consideration the characteristics of relevant peer companies, market observable data, and company-specific risk factors.

Based on this quantitative analysis, we determined that the fair value of our equity exceeded its carrying value by approximately 17%. We performed a sensitivity analysis which included an increased discount rate of 200 basis points. Based on the results of that sensitivity analysis, the goodwill was at risk of failing Step 1 impairment analysis. We believe the estimates and assumptions used in the calculations were reasonable. However, if there was an adverse change in the facts and circumstances which caused the fair value of our equity to fall below its carrying amount because of reduced operating performance, market declines, changes in the discount rate, or other conditions, then an impairment charge may be necessary in the future. As of December 31, 2016, there had been no triggering events or indicators of impairment that would require an updated impairment review.

Any material impairment of prepaid royalty and license fee assets in the future periods may require us to perform a goodwill impairment assessment. Such assessment could result in impairments to our goodwill, which could adversely impact our results of operations.

## Stock-Based Compensation

We apply the fair value provisions of ASC 718, Compensation-Stock Compensation, or ASC 718. ASC 718 requires the recognition of compensation expense, using a fair-value based method, for costs related to all share-based payments, including stock options. ASC 718 requires companies to estimate the fair value of share-based payment awards on the grant date using an option pricing model. The fair value of stock options and stock purchase rights granted pursuant to our equity incentive plans and 2007 Employee Stock Purchase Plan, respectively, is determined using the Black-Scholes valuation model. The determination of fair value is affected by the stock price, as well as assumptions regarding subjective variables such as expected employee exercise behavior and expected stock price volatility over the expected term of the award. Generally, these assumptions are based on historical information and judgment is required to determine if historical trends may be indicators of future outcomes. Employee stock-based compensation expense is calculated based on awards ultimately expected to vest and is reduced for estimated forfeitures. Forfeitures are revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates and an adjustment to stock-based compensation expense is recognized at that time. Changes to the assumptions used in the Black-Scholes option valuation calculation and the forfeiture rate, as well as future equity granted or assumed through acquisitions could significantly impact the compensation expense we recognize in relation to the future grants.

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We also grant restricted stock units, or RSUs, to our employees under our equity incentive plans. The cost of RSUs is determined using the fair value of our common stock based on the quoted closing price of our common stock on the date of grant. RSU compensation expense is calculated based on awards ultimately expected to vest and is reduced for estimated forfeitures. Forfeitures are revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates and an adjustment to stock-based compensation expense will be recognized at that time. RSUs typically vest and are settled over approximately a four-year period with 25% of the shares vesting on or around the one-year anniversary of the grant date and the remaining shares vesting quarterly thereafter. Compensation cost is amortized on a straight-line basis over the requisite service period.

## Income Taxes

We account for income taxes in accordance with ASC 740, Income Taxes, or ASC 740, which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in our financial statements or tax returns. Under ASC 740, we determine deferred tax assets and liabilities based on the temporary difference between the financial statement and tax bases of assets and liabilities using the enacted tax rates in effect for the year in which we expect the differences to reverse. We establish valuation allowances when necessary to reduce deferred tax assets to the amount we expect to realize.

We account for uncertain tax positions in accordance with ASC 740, which requires companies to adjust their financial statements to reflect only those tax positions that are more-likely-than-not to be sustained. ASC 740 prescribes a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns. Our policy is to recognize interest and penalties related to unrecognized tax benefits in income tax expense.

## Results of Operations

The following sections discuss and analyze the changes in the significant line items in our statements of operations for the comparison periods identified.

## Comparison of the Years Ended December 31, 2016 and 2015

## Revenue

Revenue by Type	Year Ended December 31,	
	2016	2015
	(In thousands)	
Micro-Transactions	\$ 164,569	\$ 208,281
Advertisements	10,345	13,126
Offers	23,393	26,289
Other	2,274	2,204
Total revenue	\$ 200,581	\$ 249,900

Our revenue decreased \$49.3 million, or 19.7%, from \$249.9 million for the year ended December 31, 2015 to \$200.6 million for the year ended December 31, 2016, which was primarily related to a \$43.7 million decrease in our revenue from micro-transactions (in-app purchases) and a \$5.7 million decrease from advertisements and offers. These decreases were primarily related to a \$41.0 million decline in revenue from our Kim Kardashian: Hollywood game, as well as declines in revenue from our Deer Hunter 2014, Racing Rivals, and Contract Killer: Sniper games of \$20.2 million, \$19.4 million, and \$14.8 million, respectively. These decreases were partially offset by increased revenue from new title launches such as the releases of Gordon Ramsay DASH in June 2016, Tap Sports Baseball 2016 in March 2016, Kendall & Kylie in February 2016, and Deer Hunter 2016 in September 2015.

We generate revenue from micro-transactions, advertisements and, offers, and we sometimes change the focus of our monetization efforts among methods within a given game over the life of the title in an attempt to maximize revenue. For example, we may elect to disable advertisements within a game if we believe doing so will encourage users to play

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the game longer and thus increase the chance that they will make micro-transactions or complete offers, which generally result in higher revenue for us than advertisements. We rely on a very small portion of our total users for nearly all of our revenue derived from in-app purchases. Since the launch of our first free-to-play titles in the fourth quarter of 2010, the percentage of unique paying users for our largest revenue-generating free-to-play games has typically been less than 2%, when measured as the number of unique paying users on a given day divided by the number of unique users on that day, though this percentage fluctuates, and it may be higher than 2% for certain of our games during specific, relatively short time periods, such as immediately following a worldwide launch or the week following content updates, marketing campaigns or certain other events. Our revenue does not include \$44.9 million of revenue as of December 31, 2016 relating primarily to micro-transactions and offers that have been deferred over the weighted average useful lives of paying users.

In 2016, Kim Kardashian: Hollywood, Cooking Dash 2016, Racing Rivals, and Tap Sports Baseball 2016, were our top four revenue-generating games and comprised 17.8% , 15.7%, 11.7%, and 11.5%, respectively, of revenue for the year. No other game generated more than 10% of revenue during the year.

International revenue (defined as revenue generated from distributors and advertising service providers whose principal operations are located outside the United States or, in the case of the digital storefronts, the revenue generated from end-user purchases made outside of the United States) decreased by \$26.5 million, from \$78.1 million in the year ended December 31, 2015 to \$51.6 million in the year ended December 31, 2016. This was primarily related to a \$12.3 million decrease in our APAC revenue and an \$11.8 million decrease in our EMEA revenue, due to a significantly lower number of new distribution contracts signed in our EMEA and APAC regions and due to the fact that our new games have a greater appeal in the United States than in international markets.

## Cost of Revenue

	Year Ended December 31, 2016      2015 (In thousands)	
Cost of revenue:		
Platform commissions, royalties and other	\$ 75,239	\$ 95,682
Impairment of prepaid royalties and minimum guarantees	30,107	2,502
Impairment and amortization of intangible assets	14,792	9,553
Total cost of revenue	\$ 120,138	\$ 107,737
Revenue	\$ 200,581	\$ 249,900
Gross margin	40.1%	56.9%

Our cost of revenue increased by \$12.4 million, or 11.5%, from \$107.7 million in the year ended December 31, 2015 to \$120.1 million in the year ended December 31, 2016. This increase was primarily due to \$14.5 million of impairments related to prepaid guaranteed royalty and license fee payments made to an affiliate of Tencent related to our Rival Fire game, and \$20.2 million of aggregate impairments related to royalties to certain of our celebrity licensors and other prepaid royalties during 2016. These charges were partially offset by a \$12.7 million decrease in platform commission fees due to a lower volume of revenue transactions through the digital storefronts, a \$4.5 million decrease in royalties associated with a decrease in royalty-burdened revenue, and a \$1.9 million decrease in non-cash warrant expense.

Revenue attributable to games based upon original intellectual property decreased as a percentage of revenue from 42.1% in the year ended December 31, 2015 to 39.7% in the year ended December 31, 2016. We expect this trend to continue since most, and potentially all, of the games that we will launch in 2017 will be based on or will otherwise incorporate licensed brands or other content. The average royalty rate that we paid on games based on or significantly incorporating licensed brands or other content, excluding royalty impairments, remained consistent at 21.9% in the years ended December 31, 2016 and December 31, 2015.

Overall royalties, including impairment of prepaid royalties and guarantees, as a percentage of total revenue

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increased from 10.8% in the year ended December 31, 2015 to 25.0% in the year ended December 31, 2016.

## Research and Development Expenses

	Year Ended December 31,	
	2016	2015
	(In thousands)	
Research and development expenses	\$ 81,879	\$ 72,856
Percentage of revenue	40.8%	29.2%

Our research and development expenses increased \$9.0 million, or 12.4%, from \$72.9 million in the year ended December 31, 2015 to \$81.9 million in the year ended December 31, 2016. The increase in research and development costs was primarily due to a \$2.9 million increase in variable compensation, a \$2.7 million increase in professional and outside services primarily related to external development, a \$1.0 million increase in allocated charges for equipment, facilities and depreciation, a \$1.0 million increase in stock based compensation, a \$570,000 increase in equipment and software expense, and a \$344,000 increase in travel and entertainment. As a percentage of revenue, research and development expenses increased from 29.2% in the year ended December 31, 2015 to 40.8% in the year ended December 31, 2016. Research and development expenses included \$4.6 million of stock-based compensation expense in the year ended December 31, 2016 and \$3.6 million in the year ended December 31, 2015. We expect our research and development expenditures to increase in 2017 compared with the 2016, despite the restructuring we implemented in January 2017, primarily due to the increase in headcount related to our recent acquisition of Crowdstar as well as our plan to hire additional development personnel in the San Francisco Bay Area and Hyderabad, India.

## Sales and Marketing Expenses

	Year Ended December 31,	
	2016	2015
	(In thousands)	
Sales and marketing expenses	\$ 48,050	\$ 48,240
Percentage of revenue	24.0%	19.3%

Our sales and marketing expenses decreased \$190,000, or 0.4%, from \$48.2 million in the year ended December 31, 2015 to \$48.1 million in the year ended December 31, 2016. The decrease was primarily due to a \$1.7 million decrease in marketing promotions associated with our free-to-play games. This decrease was partially offset by a \$730,000 increase in salaries and benefits and a \$619,000 increase in professional fees related to customer support services. As a percentage of revenue, sales and marketing expenses increased from 19.3% in the year ended December 31, 2015 to 24.0% in the year ended December 31, 2016. We expect our sales and marketing expenses to increase in 2017 in absolute dollars primarily due to the increase in headcount and increase in marketing expenditures related to user acquisition spending for both Covet Fashion and Design Home, titles we acquired from Crowdstar which has historically spent more on sales and marketing as a percentage of revenue than we have.

#### General and Administrative Expenses

	Year Ended December 31,	
	2016	2015
	(In thousands)	
General and administrative expenses	\$ 30,225	\$ 26,092
Percentage of revenue	15.1%	10.4%

Our general and administrative expenses increased \$4.1 million, or 15.8%, from \$26.1 million in 2015 to \$30.2 million in 2016. The increase in general and administrative expenses was primarily due to a \$2.3 million increase in professional fees related to our implementation of a cloud based ERP system and external consulting services expenses incurred in connection with the recent acquisition of Crowdstar, a \$1.3 million increase in salaries and benefits as



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headcount increased from 88 employees at December 31, 2015 to 94 employees at December 31, 2016, and a \$564,000 increase in stock based compensation. These increases were partially offset by a \$302,000 decrease in consulting fees and a \$103,000 decrease in travel and entertainment. As a percentage of revenue, general and administrative expenses increased from 10.4% in the year ended December 31, 2015 to 15.1% in the year ended December 31, 2016. General and administrative expenses included \$7.6 million of stock-based compensation expense in the year ended December 31, 2016 and \$7.0 million in the year ended December 31, 2015. We expect our general and administrative expenses to continue to increase in terms of absolute dollars in 2017 primarily due to the increase in headcount and accounting and professional fees for integration activities related to our recent acquisition of Crowdstar.

Other Operating Expenses

Our restructuring charge increased from \$1.1 million in the year ended December 31, 2015 to \$2.3 million in the year ended December 31, 2016, primarily due to costs associated with employee termination costs in our Long Beach, San Francisco, Bellevue, and Beijing, China offices, and lease termination costs for our Bellevue and Beijing, China offices, in the second quarter of 2016. We expect to incur additional restructuring costs in the first half of 2017 due to costs associated with employee terminations in our San Francisco, Long Beach and Bellevue offices, and lease termination costs for our Long Beach and Bellevue offices.

Interest and Other Income/(Expense), Net

Interest and other income/(expense), net, increased from net expense of \$743,000 in the year ended December 31, 2015 to net expense of \$5.8 million in the year ended December 31, 2016. This increase in expense was primarily attributable to a \$2.4 million impairment charge related to our call option for Plain Vanilla, which was due to a decline in Plain Vanilla's forecasted revenue and future cash flow outlook, a \$1.9 million charge related to the change in fair value of our investment in promissory notes issued to us by Plain Vanilla, and an \$838,000 charge related to the write-off of a cumulative translation adjustment upon liquidation of one of our United Kingdom subsidiaries.

Income Tax Expense

Our income tax expense changed from an expense of \$141,000 in 2015 to an income tax benefit of \$301,000 in 2016. The income tax benefit in 2016 was due to the release of a portion of our valuation allowance of \$328,000 resulting from the acquisition of Crowdstar Inc. in November 2016, changes in the jurisdictions included in the effective tax rate computation, and changes in pre-tax income in the United States and certain foreign entities. The provision for income taxes differs from the amount computed by applying the statutory U.S. federal rate principally due to the

effect of our non-U.S. operations, non-deductible stock-based compensation expense and change in foreign withholding taxes.

Our effective income tax rates for future periods will depend on a variety of factors, including changes in the deferred tax valuation allowance, as well as changes in our business such as intercompany transactions, any acquisitions, any changes in our international structure, any changes in the geographic location of our business functions or assets, changes in the geographic mix of our income, any changes in or termination of our agreements with tax authorities, changes in applicable accounting rules, applicable tax laws and regulations, rulings and interpretations thereof, developments in tax audit and other matters, and variations in our annual pre-tax income or loss. We incur certain tax expenses that do not decline proportionately with declines in our pre-tax consolidated income or loss. As a result, in absolute dollar terms, our tax expense will have a greater influence on our effective tax rate at lower levels of pre-tax income or loss than at higher levels. In addition, at lower levels of pre-tax income or loss, our effective tax rate will be more volatile. At December 31, 2016, we anticipated that the liability for uncertain tax positions, excluding interest and penalties, could decrease by approximately \$126,000 within the next twelve months due to the expiration of certain statutes of limitation in foreign jurisdictions in which we do business.

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## Comparison of the Years Ended December 31, 2015 and 2014

## Revenue

	Year Ended December 31,	
	2015	2014
Revenue by Type	(In thousands)	
Micro-Transactions	\$ 208,281	\$ 182,213
Advertisements	13,126	14,566
Offers	26,289	22,984
Other	2,204	3,383
Total revenue	\$ 249,900	\$ 223,146

Our revenue increased \$26.8 million, or 12.0%, from \$223.1 million for the year ended December 31, 2014 to \$249.9 million for the year ended December 31, 2015, which was primarily related to a \$26.1 million increase in our revenue from micro-transactions (in-app purchases) and a \$1.9 million increase from advertisements and offers. These increases were partially offset by a \$1.2 million decrease in premium and feature phone revenue due to the continued migration of users from feature phones to smartphone devices and our decision to concentrate our product development efforts exclusively towards developing new free-to-play titles for smartphones, tablets and other next-generation platforms.

The increase in revenue from in-app purchases, advertisements and offers was primarily attributable to an increase of \$66.6 million of revenue from three existing titles, Racing Rivals, Contract Killer Sniper, and Kim Kardashian: Hollywood, compared with these titles' performance in 2014, and the generation of \$23.0 million in revenue from two new title launches, Tap Sports Baseball 2015 and Cooking Dash 2016. These increases were partially offset by a decrease of \$48.4 million from two existing titles, Deer Hunter 2014 and Eternity Warriors 3, compared with these titles' performance in 2014. Our revenue does not include \$31.1 million of revenue as of December 31, 2015 relating primarily to micro-transactions and offers that have been deferred over the weighted average useful lives of paying users.

In 2015, Kim Kardashian: Hollywood, Racing Rivals, and Deer Hunter 2014 were our top three revenue-generating games and comprised 30.7% , 17.7%, and 10.8%, respectively, of revenue for the period. No other game generated more than 10% of revenue during the year.

International revenue decreased by \$12.6 million, from \$90.7 million in the year ended December 31, 2014 to \$78.1 million in the year ended December 31, 2015. This was primarily related to a \$7.4 million decrease in our EMEA revenue and a \$7.0 million decrease in our APAC revenue. These decreases were partially offset by a \$1.8 million increase in our Americas (excluding the United States) revenue. This decrease in our international revenue was offset by an increase of \$39.3 million in our United States revenue.

## Cost of Revenue

	Year Ended December 31, 2015              2014 (In thousands)	
Cost of revenue:		
Platform commissions, royalties and other	\$ 98,184	\$ 80,992
Impairment and amortization of intangible assets	9,553	4,767
Total cost of revenue	\$ 107,737	\$ 85,759
Revenue	\$ 249,900	\$ 223,146
Gross margin	56.9 %	61.6 %

Our cost of revenue increased \$22.0 million, or 25.6%, from \$85.8 million in the year ended December 31, 2014 to \$107.7 million in the year ended December 31, 2015. This increase was primarily due to a \$6.8 million increase in royalties associated with an increase in royalty-burdened revenue, a \$6.5 million increase in platform commissions due to a higher volume of revenue transactions through the digital storefronts, a \$4.8 million increase in amortization of intangible assets primarily associated with intangible assets purchased through our PlayFirst and Cie Games acquisitions,

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a \$2.2 million increase in prepaid royalty impairments, an \$816,000 increase in non-cash warrant expense, and a \$775,000 increase in hosting fees to support our free-to-play titles. Revenue attributable to games based upon original intellectual property decreased as a percentage of revenue from 62.7% in the year ended December 31, 2014 to 42.1% in the year ended December 31, 2015, primarily due to an increase in revenue generated from games based on or significantly incorporating licensed brands and other content. The average royalty rate that we paid on games based on or significantly incorporating licensed brands or other content, excluding royalty impairments, increased from 21.3% in the year ended December 31, 2014 to 21.9% in the year ended December 31, 2015, due to higher royalty rates for distribution of certain games based on or significantly incorporating licensed brands or other content.

Overall royalties, including impairment of prepaid royalties and guarantees, as a percentage of total revenue increased from 8.1% in the year ended December 31, 2014 to 10.6% in the year ended December 31, 2015.

## Research and Development Expenses

	Year Ended December 31,	
	2015	2014
	(In thousands)	
Research and development expenses	\$ 72,856	\$ 64,284
Percentage of revenue	29.2 %	28.8 %

Our research and development expenses increased \$8.6 million, or 13.3%, from \$64.3 million in the year ended December 31, 2014 to \$72.9 million in the year ended December 31, 2015. The increase in research and development costs was primarily due to a \$10.5 million increase in salaries and benefits, as our research and development headcount increased from 520 employees at December 31, 2014 to 601 employees at December 31, 2015, resulting primarily from headcount added through the addition of studio personnel throughout our North America studios, as well as a \$4.0 million increase in outside services primarily related to external development. These increases were partially offset by a \$3.9 million decrease in stock-based compensation expense, as stock-based compensation expense attributable to the contingent consideration that was issuable to the employees who were former shareholders of Blammo became fully vested during the third quarter of 2014, and a \$2.1 million decrease in variable compensation resulting from lower attainment of employee and executive bonus targets. As a percentage of revenue, research and development expenses increased from 28.8% in the year ended December 31, 2014 to 29.2% in the year ended December 31, 2015. Research and development expenses included \$3.6 million of stock-based compensation expense in the year ended December 31, 2015 and \$7.4 million in the year ended December 31, 2014.

## Sales and Marketing Expenses

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	Year Ended December 31,			
	2015	2014		
	(In thousands)			
Sales and marketing expenses	\$ 48,240	\$ 45,076		
Percentage of revenue	19.3 %	20.2 %		

Our sales and marketing expenses increased \$3.2 million, or 7.0%, from \$45.1 million in the year ended December 31, 2014 to \$48.2 million in the year ended December 31, 2015. The increase was primarily due to a \$3.3 million increase in marketing promotions associated with our free-to-play games and a \$570,000 increase in professional fees. These increases were partially offset by a decrease of \$738,000 in salaries, benefits and variable compensation. As a percentage of revenue, sales and marketing expenses decreased from 20.2% in the year ended December 31, 2014 to 19.3% in the year ended December 31, 2015. Sales and marketing expenses included \$1.1 million of stock-based compensation expense in the year ended December 31, 2015 and \$701,000 in the year ended December 31, 2014.

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## General and Administrative Expenses

	Year Ended December 31,	
	2015	2014
	(In thousands)	
General and administrative expenses	\$ 26,092	\$ 25,019
Percentage of revenue	10.4 %	11.2 %

Our general and administrative expenses increased \$1.1 million, or 4.3%, from \$25.0 million in 2014 to \$26.1 million in 2015. The increase in general and administrative expenses was primarily due to a \$3.5 million increase in stock-based compensation due to stock-based awards issued to new employees and other executives. These increases were partially offset by a \$2.6 million decrease in salaries, benefits and variable compensation resulting from lower attainment of employee and executive bonuses in 2015. Our general and administrative headcount increased from 79 employees at December 31, 2014 to 88 employees at December 31, 2015. As a percentage of revenue, general and administrative expenses decreased from 11.2% in the year ended December 31, 2014 to 10.4% in the year ended December 31, 2015. General and administrative expenses included \$7.0 million of stock-based compensation expense in the year ended December 31, 2015 and \$3.5 million in the year ended December 31, 2014.

## Other Operating Expenses

Our restructuring charge increased from \$435,000 in the year ended December 31, 2014 to \$1.1 million in the year ended December 31, 2015, due to increased employee termination costs in our APAC and Washington offices that took place in the fourth quarter of 2015.

Our amortization of intangible assets decreased from \$508,000 in the year ended December 31, 2014 to \$201,000 in the year ended December 31, 2015 due to the non-compete agreements associated with our acquisition of Blammo in August 2011 being fully amortized in the first quarter of 2015.

## Interest and Other Income/(Expense), Net

Interest and other income/(expense), net, decreased from net expense of \$1.5 million in the year ended December 31, 2014 to net expense of \$743,000 in the year ended December 31, 2015. This decrease was primarily due to foreign

currency losses related to the revaluation of certain assets and liabilities including accounts payable and accounts receivable caused by the fluctuation in foreign exchange rates against the United States Dollar.

#### Income Tax Benefit/(Expense)

Our income tax benefit changed from an income tax benefit of \$7.6 million in 2014 to an income tax expense of \$141,000 in 2015. The income tax benefit in 2014 was due to the release of a portion of our valuation allowance for \$6.8 million, primarily resulting from our acquisition of Cie Games. The change in 2015 income tax expense was also due to changes in the jurisdictions included in the anticipated effective tax rate computation and changes in pre-tax income in the United States and certain foreign entities. The provision for income taxes differs from the amount computed by applying the statutory U.S. federal rate principally due to the effect of our non-U.S. operations, non-deductible stock-based compensation expense and change in foreign withholding taxes.

#### Liquidity and Capital Resources

	Year Ended December 31,		
	2016	2015	2014
	(In thousands)		
Consolidated Statement of Cash Flows Data:			
Cash flows (used in)/provided by operating activities	(19,784)	(11,465)	30,574
Cash flows used in investing activities	(51,544)	(6,924)	(26,188)
Cash flows (used in)/provided by financing activities	(6,785)	128,370	38,955



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Since our inception, we have generally incurred recurring losses and negative annual cash flows from operating activities. As of December 31, 2016, we had an accumulated deficit of \$338.7 million.

### Operating Activities

In 2016, net cash used in operating activities was \$19.8 million, which was primarily due to an \$87.4 million net loss, a \$16.7 million increase in prepaid royalties and a \$2.3 million increase in prepaid expenses and other assets. These amounts were partially offset by a \$12.3 million increase in deferred revenue, an increase in accrued compensation of \$4.6 million, and a \$3.1 million increase in accounts payable and other accrued liabilities. Adjustments for non-cash items included a \$30.1 million impairment of prepaid royalties and minimum guarantees, a \$14.8 million impairment and amortization of intangible assets, stock-based compensation expense of \$13.3 million, impairment of the Plain Vanilla call option of \$2.4 million, a \$1.9 million decrease in fair value of the Plain Vanilla promissory notes, and depreciation expense of \$2.9 million.

In 2015, net cash used in operating activities was \$11.5 million, which was primarily due to a \$29.7 million increase in prepaid royalties and license fees and other prepaid assets, as we signed additional celebrity licensing agreements in 2015, a net loss of \$7.2 million, a decrease in deferred revenue of \$6.2 million, a decrease in accrued royalties of \$5.1 million, a decrease in accrued compensation of \$3.6 million, a decrease of \$2.0 million in accounts payable and other accrued liabilities, a decrease in non-current liabilities of \$1.5 million, and adjustments for non-cash items, including stock-based compensation expense of \$11.7 million, amortization expense of \$9.8 million, depreciation expense of \$2.9 million, and a non-cash warrant expense of \$2.0 million. These factors were partially offset by a decrease in accounts receivable of \$13.4 million which was primarily due to early cash collection from customers.

In 2014, net cash provided by operating activities was \$30.6 million, which was primarily due to net income of \$8.1 million, an increase in deferred revenue of \$18.8 million, an increase in accrued royalties of \$10.2 million, an increase in accrued compensation of \$5.3 million, and adjustments for non-cash items, including stock-based compensation expense of \$11.6 million, amortization expense of \$5.3 million, depreciation expense of \$2.5 million, a non-cash warrant expense of \$1.2 million, and a fair value expense adjustment of \$835,000 related to the Blammo earnout for non-employee shareholders. These favorable factors were partially offset by an increase in accounts receivable of \$9.2 million, an increase in prepaid expenses and other current assets of \$9.1 million, a decrease in non-current liabilities of \$8.6 million, an increase in prepaid royalties of \$5.2 million, and a decrease of \$4.3 million in accounts payable and other accrued liabilities.

### Investing Activities

Our primary investing activities have consisted of acquisitions of mobile gaming companies and purchases of property and equipment and leasehold improvements for our offices.

In 2016, we used \$51.5 million of cash for investing activities primarily related to net cash paid of \$36.7 million for the acquisition of 80.6% of the outstanding voting interest in Crowdstar, investments in Plain Vanilla and Dairy Free of \$9.5 million in the aggregate, purchases of intangible assets of \$2.5 million, and property and equipment purchases of \$3.1 million. These increases were partially offset by a decrease in restricted cash of \$186,000.

In 2015, we used \$6.9 million of cash for investing activities, of which \$2.8 million related to property and equipment purchases, \$2.5 million related to purchases of intangible assets, \$1.9 million related to acquisition consideration paid to former Cie Games stockholders, and other investments of \$251,000, partially offset by a release of \$492,000 of restricted cash relating to letters of credit on our San Francisco and Bellevue leases.

In 2014, we used \$26.2 million of cash for investing activities, of which \$22.6 million related to the acquisitions of PlayFirst and Cie Games and \$3.3 million for property and equipment purchases.

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Financing Activities

In 2016, net cash used in financing activities was \$6.8 million due primarily to \$4.7 million paid to acquire the remaining outstanding interest in Crowdstar, \$2.4 million of taxes paid related to the net share settlement of RSUs, and \$1.9 million related to payments on an acquired line of credit and term loan from the Crowdstar acquisition. These outflows were partially offset by \$2.2 million in proceeds we received from option exercises and purchases under our employee stock purchase plan.

In 2015, net cash provided by financing activities was \$128.4 million due primarily to the aggregate net proceeds of \$125.2 million, after offering expenses, we received in connection with the purchase of 21,000,000 shares of our common stock by Red River, as well as \$6.1 million related to option and warrant exercises and purchases under our employee stock purchase plan. These cash inflows were partially offset by \$3.0 million of taxes paid related to the net share settlement of RSUs.

In 2014, net cash provided by financing activities was \$39.0 million due to proceeds received from our underwritten public offering in June 2014, option and warrant exercises and purchases under our employee stock purchase plan. These cash inflows were partially offset by payments made on the line of credit agreement and outstanding term loan assumed in our acquisition of PlayFirst.

Sufficiency of Current Cash and Cash Equivalents

Our cash and cash equivalents were \$102.1 million as of December 31, 2016. Cash and cash equivalents held outside of the U.S. in various foreign subsidiaries were \$3.1 million as of December 31, 2016, most of which were held by our Canadian, Indian and Russian subsidiaries. Under current tax laws and regulations, if cash and cash equivalents held outside the U.S. are distributed to the U.S. in the form of dividends or otherwise, we may be subject to additional U.S. income taxes and foreign withholding taxes. We have not provided deferred taxes on unremitted earnings attributable to foreign subsidiaries, excluding China, because their earnings are intended to be reinvested indefinitely. However, if any such balances were to be repatriated, additional U.S. federal income tax payments could result. Computation of the potential deferred tax liabilities associated with unremitted earnings deemed to be indefinitely reinvested is not practicable.

We expect to fund our operations, grow our business and satisfy our contractual obligations during the next 12 months primarily through our cash and cash equivalents. We believe our cash and cash equivalents will be sufficient to meet our anticipated cash needs for at least the next 12 months from the date of this report; however, our cash requirements for the next 12 months may be greater than we anticipate due to, among other reasons, revenue that is lower than we

currently anticipate, greater than expected operating expenses, particularly with respect to our research and development and sales and marketing initiatives, use of cash to pay minimum guaranteed royalties, use of cash to fund our foreign operations and the impact of foreign currency rate changes, unanticipated limitations or timing restrictions on our ability to access funds that are held in our non-U.S. subsidiaries or any investments or acquisitions that we may decide to pursue. We expect to continue to use cash to fund minimum guaranteed royalty payments during 2017 as milestone payments become due on games we publish and/or develop that incorporate licensed property, as well as to fund the purchase price of any acquisitions. If the games we develop based on such licensing arrangements fail to perform in accordance with our expectations, we may not fully recoup these minimum guaranteed royalty payments, which would negatively impact our operating results.

If our cash sources are insufficient to satisfy our cash requirements, we may seek to raise additional capital. However, we may be unable to do so on terms that are favorable to us or at all, particularly given current capital market and overall economic conditions.

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## Contractual Obligations

The following table is a summary of our contractual obligations as of December 31, 2016:

	Payments Due by Period				
	Total	2017	2018-2019	2020-2021	Thereafter
	(In thousands)				
Operating lease obligations	\$ 12,229	\$ 4,715	\$ 5,664	\$ 1,850	\$ —
Guaranteed royalties (1)	26,433	21,097	5,336	—	—
Developer commitments (2)	1,235	1,235	—	—	—
Total contractual obligations (3)	\$ 39,897	\$ 27,047	\$ 11,000	\$ 1,850	\$ —

- (1) We have entered into license and publishing agreements with various celebrities and other owners of brands, properties and other content to develop and publish games and other software applications for mobile devices. These agreements typically require us to make non-refundable, but recoupable payments of minimum guaranteed royalties or license fees as up-front payments or over the term of the agreement.
- (2) From time to time we enter into contracts with various external software developers to design and develop games and other software applications. We advance funds to these third-party developers, typically payable in installments, upon the completion of specific development milestones.
- (3) We have omitted uncertain income tax liabilities from this table due to the inherent uncertainty regarding the timing of potential issue resolution. Specifically, either the underlying positions have not been fully developed enough under audit to quantify at this time or the years relating to the issues for certain jurisdictions are not currently under audit. At December 31, 2016, we had \$718,000 of gross unrecognized tax benefits, included in "Other long-term Liabilities" in the consolidated balance sheet.

## Off-Balance Sheet Arrangements

At December 31, 2016, we did not have any significant off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of Regulation S-K, that are not already disclosed in this report.

## Inflation

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs were to become subject to significant inflationary pressures, we might not be able to fully offset these higher costs through price increases. Our inability or failure to do so could harm our business, operating results and financial condition.

#### Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, 2014-15, Presentation of Financial Statements – Going Concern (Subtopic 205-40). This amendment requires management to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the entity’s ability to continue as a going concern, which evaluation is currently performed by our external auditors. Management will be required to perform this assessment for both interim and annual reporting periods and must make certain disclosures if it concludes that substantial doubt exists. This amendment is effective for annual and interim periods ending after December 15, 2016. The adoption of this standard did not have any effect on our consolidated financial statements for the year ended December 31, 2016 as no substantial doubt exists about our ability to continue as a going concern.

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In January 2017, the FASB issued ASU 2017-04, Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment. This new accounting standard update simplifies the measurement of goodwill by eliminating the Step 2 impairment test. Step 2 measures a goodwill impairment loss by comparing the implied fair value of goodwill with the carrying amount of that goodwill. The new guidance requires a comparison of our fair value of with our carrying amount and we are required to recognize an impairment charge for the amount by which the carrying amount exceeds the fair value. Additionally, we should consider income tax effects from any tax deductible goodwill on the carrying amount when measuring the goodwill impairment loss, if applicable. The new guidance becomes effective for goodwill impairment tests in fiscal years beginning after December 15, 2019, though early adoption is permitted. We are currently assessing the impact of this new guidance.

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations (Topic 805), which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The standard will be effective in the first quarter of fiscal 2019. Early adoption is permitted. We are currently evaluating the impact of this standard on our consolidated financial statements.

In December 2016, the FASB issued ASU No. 2016-19, Technical Corrections and Improvements. The amendments in ASU 2016-19 represent changes to clarify the accounting standard codification, correct unintended application of guidance, or make minor improvements to the accounting standards codification that are not expected to have a significant effect on current accounting practice or create a significant administrative cost to most entities. For public companies, the standard is effective immediately for amendments that do not have transition guidance. Amendments that are subject to transition guidance, the effective date is interim and annual reporting periods beginning after December 15, 2016. We are currently evaluating the impact of those amendments on our consolidated financial statements. We adopted the standard immediately upon issuance for amendments that do not have transition guidance. The adoption of the standard did not have an impact on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires amounts generally described as restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown in the statement of cash flows. The standard will be effective in the first quarter of fiscal 2018. Early adoption is permitted. We are currently evaluating the impact of this standard on our consolidated financial statements.

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. ASU 2016-16 requires recognition of the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The guidance will be effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. ASU 2016-15 addresses eight specific cash flow issues with the objective of reducing existing diversity in practice. The guidance will be effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The new guidance, which simplifies the accounting and presentation for share-based payments, provides for a number of amendments which impact the accounting for income taxes and the accounting for forfeitures. ASU 2016-09 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2016 and requires varied adoption methods for each respective amendment. We will adopt this standard in the first quarter of 2017. We are currently working with our stock administrator to determine the exact quantitative impact of the revised standard; however we believe that the impact will be limited to a true up entry between additional paid-in capital and retained earnings with no impact to the income statement. Additionally, we plan to make the policy election to account for forfeitures as they occur.



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In February 2016, the FASB issued ASU 2016-02, Leases. The guidance requires lessees to recognize most leases as assets and liabilities on the balance sheet. Qualitative and quantitative disclosures will be enhanced to better understand the amount, timing and uncertainty of cash flows arising from leases. The guidance is effective for annual and interim periods beginning after December 31, 2018. The updated standard mandates a modified retrospective transition method with early adoption permitted. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments - Overall - Recognition and Measurement of Financial Assets and Financial Liabilities. The guidance requires entities to measure equity investments that do not result in consolidation and are not accounted for under the equity method at fair value and recognize any changes in fair value in net income unless the investments qualify for a practicability exception. The updated standard is effective for interim and annual reporting periods beginning after December 15, 2017. We are currently evaluating the effect that the updated standard will have on our consolidated financial statements.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers. Under the standard, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The new standard is effective for annual reporting periods, and interim periods within those annual periods, beginning after December 15, 2017, with early adoption permitted for annual reporting periods beginning after December 15, 2016. We do not plan to early adopt, and accordingly, will adopt the new standard effective January 1, 2018. The FASB recently issued several amendments to the standard, including clarifications on disclosure of prior-period performance obligations and remaining performance obligations.

The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). We have not yet selected a transition method.

We are in the initial stages of evaluating the impact of the new standard on our accounting policies, processes, and system requirements. We have assigned internal resources in addition to the engagement of third party service providers to assist in the evaluation. While we are continuing to assess all potential impacts of this standard we will continue to be considered the principal in our transactions and are the primary obligor to end-users for smartphone games distributed through digital storefronts and advertisements served through our advertising networks. Therefore, revenue related to these arrangements will continue to be recognized on a gross basis, if the necessary information about the gross amounts or platform fees charged, before any adjustments, are made available to us by the digital storefronts and advertising networks.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate and Credit Risk

Our exposure to interest rate risk relates primarily to our investment portfolio and the potential losses arising from changes in interest rates.

We are potentially exposed to the impact of changes in interest rates as they affect interest earned on our investment portfolio. As of December 31, 2016, we had no short-term investments and substantially all \$102.1 million of our cash and cash equivalents was held in operating bank accounts earning nominal interest. Accordingly, we do not believe that a 10% change in interest rates would have a significant impact on our interest income, operating results or liquidity related to these amounts.

The primary objectives of our investment activities are, in order of importance, to preserve principal, provide liquidity and maximize income without significantly increasing risk. We do not currently use or plan to use derivative financial instruments in our investment portfolio.

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As of December 31, 2016 and December 31, 2015, our cash and cash equivalents were maintained by financial institutions in the United States, the United Kingdom, Canada, China, Hong Kong, India, Russia, Japan, Korea and our current deposits are likely in excess of insured limits.

Our accounts receivable primarily relate to revenue earned from digital storefront operators and advertising platforms. We perform ongoing credit evaluations of our customers' and the digital storefronts' financial condition but generally require no collateral from them. At December 31, 2016, Apple Inc., or Apple, accounted for 43.9%, Google Inc., or Google, accounted for 22.3%, Jirbo, Inc. (dba AdColony), or Jirbo, accounted for 10.8%, and Fyber GmbH, or Fyber, accounted for 10.5%, of total accounts receivable. At December 31, 2015, Apple accounted for 31.4%, Jirbo accounted for 26.2%, and Google accounted for 19.2% of total accounts receivable. No other customer or Digital Storefront represented more than 10% of our total accounts receivable as of these dates.

Foreign Currency Exchange Risk

We transact business in 100 countries in more than 30 different currencies, and in 2016 and 2015, some of these currencies fluctuated significantly. Our operations outside of the United States are maintained in their local currency, with the significant operating currencies consisting of British Pound Sterling, or GBP, Chinese Renminbi, Euro, Indian Rupee and Russian Ruble. Although recording operating expenses in the local currency of our foreign operations mitigates some of the exposure of foreign currency fluctuations, variances among the currencies of our customers and our foreign operations relative to the United States Dollar, or USD, could have and have had a material impact on our results of operations.

Our foreign currency exchange gains and losses have been generated primarily from fluctuations in GBP versus the USD, the Russian Ruble versus the USD, the Euro versus GBP and the Indian Rupee versus the USD. At month-end, non-functional currency-denominated accounts receivable and intercompany balances are marked to market and unrealized gains and losses are included in other income (expense), net. Translation adjustments arising from the use of differing exchange rates are included in accumulated other comprehensive income in stockholders' equity. We have in the past experienced, and in the future expect to experience, foreign currency exchange gains and losses on our accounts receivable and intercompany receivables and payables. Foreign currency exchange gains and losses could have a material adverse effect on our business, operating results and financial condition.

There is also additional risk if the currency is not freely or actively traded. Some currencies, such as the Chinese Renminbi, in which our Chinese operations principally transact business, are subject to limitations on conversion into other currencies, which can limit our ability to react to foreign currency devaluations.

To date, we have not engaged in exchange rate hedging activities, and we do not expect to do so in the foreseeable future.

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Item 8. Financial Statements and Supplementary Data

GLU MOBILE INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Glu Mobile Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of comprehensive (loss)/income, of stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Glu Mobile Inc. and its subsidiaries at December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

As described in Management's Report on Internal Control over Financial Reporting, management has excluded Crowdstar Inc. from its assessment of internal control over financial reporting as of December 31, 2016 because it was acquired by the Company in a purchase business combination during 2016. We have also excluded Crowdstar Inc. from our audit of internal control over financial reporting. Crowdstar Inc. is a wholly-owned subsidiary whose total assets and total revenues represent 4.1% and 1.0%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2016.

/s/ PricewaterhouseCoopers LLP

San Francisco, California

March 10, 2017

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GLU MOBILE INC.

## CONSOLIDATED BALANCE SHEETS

(in thousands, except per share data)

	December 31, 2016	December 31, 2015
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 102,102	\$ 180,542
Accounts receivable, net	21,477	17,956
Prepaid royalties (including prepaid royalties to a related party of \$0 and \$7,949 as of December 31, 2016 and December 31, 2015, respectively)	12,465	23,715
Prepaid expenses and other assets	18,986	14,841
Total current assets	155,030	237,054
Property and equipment, net	5,640	5,447
Restricted cash	1,312	1,498
Long-term prepaid royalties (including long-term prepaid royalties to a related party of \$0 and \$2,051 as of December 31, 2016 and December 31, 2015, respectively)	31,288	46,944
Other long-term assets	3,506	1,386
Intangible assets, net (including intangible assets acquired from a related party of \$0 and \$5,000 as of December 31, 2016 and December 31, 2015, respectively)	25,896	22,767
Goodwill	116,832	87,890
Total assets	\$ 339,504	\$ 402,986
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 16,298	\$ 9,386
Accrued liabilities	1,788	1,654
Accrued compensation	12,495	7,100
Accrued royalties and license fees (including accrued royalties and license fees to a related party of \$0 and \$10,449 as of December 31, 2016 and December 31, 2015, respectively)	8,623	21,032
Accrued restructuring	271	342
Deferred revenue	44,865	31,112
Total current liabilities	84,340	70,626
	20,836	24,347



Long-term accrued royalties (including long-term accrued royalties to a related party of \$0 and \$2,051 as of December 31, 2016 and December 31, 2015, respectively)

Other long-term liabilities	1,514	1,585
Total liabilities	106,690	96,558

Commitments and contingencies (Note 8)

Stockholders' equity:

Preferred stock, \$0.0001 par value; 5,000 shares authorized at

December 31, 2016 and December 31, 2015; no shares issued and outstanding at December 31, 2016 and December 31, 2015

— —

Common stock, \$0.0001 par value; 250,000 shares authorized at

December 31, 2016 and December 31, 2015; 134,001 and 131,580 shares issued and outstanding at December 31, 2016 and December 31, 2015

13 13

Additional paid-in capital

571,243 557,748

Accumulated other comprehensive income/(loss)

246 (85)

Accumulated deficit

(338,688) (251,248)

Total stockholders' equity

232,814 306,428

Total liabilities and stockholders' equity

\$ 339,504 \$ 402,986

The accompanying notes are an integral part of these consolidated financial statements.

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## GLU MOBILE INC.

## CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data)

	Year Ended December 31,		
	2016	2015	2014
Revenue	\$ 200,581	\$ 249,900	\$ 223,146
Cost of revenue:			
Platform commissions, royalties and other	75,239	95,682	80,735
Impairment of prepaid royalties and minimum guarantees (including impairment of prepaid royalties and minimum guarantees paid to a related party of \$9,866, \$0, and \$0 as of December 31, 2016, December 31, 2015, and December 31, 2014, respectively)	30,107	2,502	257
Impairment and amortization of intangible assets (including impairment and amortization of intangible assets acquired from a related party of \$5,000, \$0, and \$0 as of December 31, 2016, December 31, 2015, and December 31, 2014, respectively)	14,792	9,553	4,767
Total cost of revenue	120,138	107,737	85,759
Gross profit	80,443	142,163	137,387
Operating expenses:			
Research and development	81,879	72,856	64,284
Sales and marketing	48,050	48,240	45,076
General and administrative	30,225	26,092	25,019
Amortization of intangible assets	—	201	508
Restructuring charge	2,279	1,075	435
Total operating expenses	162,433	148,464	135,322
(Loss)/income from operations	(81,990)	(6,301)	2,065
Interest and other expense, net:			
Interest income / (expense)	(2)	49	30
Other expense	(5,749)	(792)	(1,502)
Interest and other expense, net	(5,751)	(743)	(1,472)
(Loss)/income before income taxes	(87,741)	(7,044)	593
Income tax benefit/(provision)	301	(141)	7,555
Net (loss)/income	\$ (87,440)	\$ (7,185)	\$ 8,148

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Net (loss)/income per common share - basic and diluted			
Basic	(0.66)	(0.06)	0.09
Diluted	(0.66)	(0.06)	0.08
Weighted average common shares outstanding - basic and diluted			
Basic	131,804	118,775	91,826
Diluted	131,804	118,775	96,922

The accompanying notes are an integral part of these consolidated financial statements.

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GLU MOBILE INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS)/INCOME

(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Net (loss)/income	\$ (87,440)	\$ (7,185)	\$ 8,148
Other comprehensive (loss)/income:			
Foreign currency translation adjustments (1)	331	(77)	(315)
Other comprehensive (loss)/income:	331	(77)	(315)
Comprehensive (loss)/income	\$ (87,109)	\$ (7,262)	\$ 7,833

(1) Includes write-off of cumulative translation adjustment upon substantial liquidation of the Company's United Kingdom entity which is recognized

in other expense in the Company's consolidated statement of operations for the year ended December 31, 2016.

The accompanying notes are an integral part of these consolidated financial statements.

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GLU MOBILE INC.

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in thousands)

	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Accumulated Other Compre- hensive Income (loss)	Accumulated Deficit	Total Stockholders' Equity Deficit
	(In thousands, except per share data)					
Balances at December 31, 2013	78,464	\$ 8	\$ 298,593	\$ 307	\$ (252,211)	\$ 46,697
Net loss	-	-	-	-	8,148	8,148
Stock-based compensation expense	-	-	7,073	-	-	7,073
Issuance of common stock upon exercise of stock options	2,867	1	6,270	-	-	6,271
Issuance of common stock upon exercise of warrants	1,191	-	2,786	-	-	2,786
Taxes paid related to net share settlement of equity awards	348	-	(896)	-	-	(896)
Issuance of common stock pursuant to Employee Stock Purchase Plan	426	-	1,076	-	-	1,076
Issuance of common stock as contingent consideration earned	1,185	-	5,821	-	-	5,821
Issuance of common stock upon Public Offering, net of issuance costs	9,861	1	32,057	-	-	32,058
Non-cash warrant expense	-	-	1,126	-	-	1,126
Issuance of common stock as consideration for acquisitions	12,832	1	61,860	-	-	61,861
Other comprehensive loss	-	-	-	(315)	-	(315)
Balances at December 31, 2014	107,174	\$ 11	\$ 415,766	\$ (8)	\$ (244,063)	\$ 171,706
Net loss	-	-	-	-	(7,185)	(7,185)
Stock-based compensation expense	-	-	11,686	-	-	11,686
Issuance of common stock upon exercise of stock options	1,440	-	3,794	-	-	3,794
Issuance of common stock upon exercise of warrants	450	-	676	-	-	676

Taxes paid related to net share settlement of equity awards	1,090	-	(3,018)			(3,018)
Tax benefits of exercised stock options	-	-	107	-	-	107
Issuance of common stock pursuant to Employee Stock Purchase Plan	426	-	1,655	-	-	1,655
Issuance of common stock upon private offering, net of issuance costs	21,000	2	125,154	-	-	125,156
Non-cash warrant expense	-	-	1,928	-	-	1,928
Other comprehensive loss	-	-	-	(77)	-	(77)
Balances at December 31, 2015	131,580	\$ 13	\$ 557,748	\$ (85)	\$ (251,248)	\$ 306,428
Net loss	-	-	-	-	(87,440)	(87,440)
Stock-based compensation expense	-	-	13,263	-	-	13,263
Issuance of common stock upon exercise of stock options	270	-	294	-	-	294
Taxes paid related to net share settlement of equity awards	1,401	-	(2,405)	-	-	(2,405)
Issuance of common stock pursuant to Employee Stock Purchase Plan	750	-	1,878	-	-	1,878
Non-cash warrant expense	-	-	465	-	-	465
Other comprehensive income	-	-	-	331	-	331
Balances at December 31, 2016	134,001	\$ 13	\$ 571,243	\$ 246	\$ (338,688)	\$ 232,814

The accompanying notes are an integral part of these consolidated financial statements.

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GLU MOBILE INC.

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net (loss)/income	\$ (87,440)	\$ (7,185)	\$ 8,148
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation	2,947	2,861	2,513
Impairment and amortization of intangible assets (including impairment and amortization of intangible assets acquired from a related party of \$5,000, \$0, and \$0 as of December 31, 2016, December 31, 2015, and December 31, 2014, respectively)	14,792	9,754	5,275
Change in fair value of investments	1,900	—	835
Non-cash foreign currency translation loss	999	792	1,495
Stock-based compensation	13,263	11,686	11,633
Non-cash warrant (benefit)/expense	(55)	2,009	1,192
Other non-cash income tax expense	—	—	1,531
Impairment of prepaid royalties and minimum guarantees (including impairment of prepaid royalties and minimum guarantees paid to a related party of \$9,866, \$0, and \$0 as of December 31, 2016, December 31, 2015, and December 31, 2014, respectively)	30,107	2,502	257
Impairment of investments	2,600	—	—
Changes in allowance for doubtful accounts	(120)	418	(162)
Changes in operating assets and liabilities, net of effect of acquisitions:			
Accounts receivable	402	13,408	(9,195)
Prepaid royalties	(16,675)	(31,776)	(5,209)
Prepaid expenses and other assets	(2,336)	2,049	(9,123)
Accounts payable and other accrued liabilities	3,135	(1,701)	(4,298)
Accrued liabilities	65	(259)	(20)
Accrued compensation	4,577	(3,639)	5,259
Accrued royalties and license fees	55	(5,070)	10,231
Deferred revenue	12,251	(6,208)	18,810
Accrued restructuring	(70)	342	—
Other long-term liabilities	(181)	(1,448)	(8,598)
Net cash (used in)/generated from operating activities	(19,784)	(11,465)	30,574
Cash flows from investing activities:			
Purchase of property and equipment	(3,070)	(2,751)	(3,292)
Net cash paid for acquisitions	(36,660)	(1,914)	(22,586)
(Increase)/decrease in restricted cash	186	492	(60)

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Investments in Plain Vanilla Corp and Dairy Free Games, Inc. (Note 6)	(9,500)	—	—
Purchase of intangible assets (including purchase of intangible assets from a related party of \$2,500, \$0, and \$0 as of December 31, 2016, December 31, 2015, and December 31, 2014, respectively)	(2,500)	(2,500)	—
Other investing activities	—	(251)	(250)
Net cash used in investing activities	(51,544)	(6,924)	(26,188)
Cash flows from financing activities:			
PlayFirst payments on acquired line of credit and term loan	—	—	(2,340)
Crowdstar payments on acquired line of credit and term loan	(1,885)	—	—
Proceeds from public offering, net of issuance costs	—	—	32,058
Proceeds from exercise of stock options and purchases under the ESPP	2,172	5,449	7,347
Taxes paid related to net share settlement of equity awards	(2,405)	(3,018)	(896)
Excess tax benefit from stock awards	—	107	—
Cash paid to acquire non-controlling interest in Crowdstar	(4,667)	—	—
Proceeds from exercise of stock warrants and issuance of common stock	—	676	2,786
Proceeds from private offering, net of issuance costs	—	125,156	—
Net cash (used in)/provided by financing activities	(6,785)	128,370	38,955
Effect of exchange rate changes on cash	(327)	(351)	(925)
Net (decrease)/increase in cash and cash equivalents	(78,440)	109,630	42,416
Cash and cash equivalents at beginning of period	180,542	70,912	28,496
Cash and cash equivalents at end of period	\$ 102,102	\$ 180,542	\$ 70,912
Supplemental disclosures of cash flow information			
Common stock issued for acquisitions	\$ —		61,861
Common stock issued as contingent consideration earned	\$ —	\$ —	5,821
Income taxes paid	\$ 174	310	303
The accompanying notes are an integral part of these consolidated financial statements.			



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GLU MOBILE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except per share data and percentages)

NOTE 1 — THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

Glu Mobile Inc. (the “Company” or “Glu”) was incorporated in Nevada in May 2001 and reincorporated in the state of Delaware in March 2007. The Company develops, publishes, and markets a portfolio of games designed for users of smartphones and tablet devices who download and make purchases within its games through direct-to-consumer digital storefronts, such as the Apple App Store, Google Play Store, Amazon Appstore and others (“Digital Storefronts”). The Company creates games based on its own original brands, as well as third-party licensed brands, properties and other content.

Basis of Presentation

The Company's consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States.

Basis of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All material intercompany balances and transactions have been eliminated.

Use of Estimates

The preparation of financial statements and related disclosures in conformity with U.S. generally accepted accounting principles (“U.S. GAAP”) requires the Company’s management to make judgments, assumptions and estimates that affect the amounts reported in its consolidated financial statements and accompanying notes. Management bases its estimates on historical experience and on various other assumptions it believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Significant estimates and assumptions reflected in the financial statements include, but are not limited to, the estimated lives that the Company uses for revenue recognition, the allowance for doubtful accounts, useful lives of property and equipment and intangible assets, valuation and realizability of deferred tax assets and uncertain tax positions, fair value of stock awards issued, fair value of warrants issued, accounting for business combinations, evaluating goodwill, long-lived assets for impairment, realization of prepaid royalties and fair value of investments. Actual results may differ from these estimates and these differences may be material.

#### Variable Interest Entities

The Company has interests in other entities that are variable interest entities (“VIEs”). Determining whether to consolidate a VIE requires judgment in assessing (i) whether an entity is a VIE and (ii) if the Company is the entity’s primary beneficiary and thus required to consolidate the entity. To determine if the Company is the primary beneficiary of a VIE, the Company evaluates whether it has (i) the power to direct the activities that most significantly impact the VIE’s economic performance and (ii) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. The Company’s evaluation includes identification of significant activities and an assessment of its ability to direct those activities based on governance provisions and other applicable agreements and circumstances. The Company’s assessment of whether it is the primary beneficiary of its VIEs requires significant assumptions and judgment.

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### Investments

The Company's investments consist of equity investments and investments in financial instruments of unconsolidated entities. The Company monitors its investments for impairment and makes appropriate reductions in carrying values if it determines that an impairment charge is required based on qualitative and quantitative information. The investments are included in other long-term assets in the consolidated balance sheets.

### Revenue Recognition

The Company generates revenue through in-app purchases within its games on smartphones and tablets, such as Apple's iPhone and iPad and mobile devices utilizing Google's Android operating system. Smartphone and tablet games are distributed primarily through Digital Storefronts.

### Revenue

The Company distributes its games for smartphones and tablets to the end customer through Digital Storefronts. Within these Digital Storefronts, users can download the Company's free-to-play games and pay to acquire virtual currency which can be redeemed in the game for virtual goods. The Company recognizes revenue, when persuasive evidence of an arrangement exists, the service has been provided to the user, the price paid by the user is fixed or determinable, and collectability is reasonably assured. Determining whether and when some of these criteria have been satisfied requires judgments that may have a significant impact on the timing and amount of revenue the Company reports in each period. For the purposes of determining when the service has been provided to the player, the Company has determined that an implied obligation exists to the paying user to continue displaying the purchased virtual goods within the game over the estimated average playing period of paying players for the game, which represents the Company's best estimate of the estimated average life of virtual goods.

The Company sells both consumable and durable virtual goods and receives reports from the Digital Storefronts, which breakdown the various purchases made from their games over a given time period. The Company reviews these reports to determine on a per-item basis whether the purchase was a consumable virtual good or a durable virtual good. Consumable goods are items that can be purchased directly by the player through the Digital Storefront and are consumed at a predetermined time or otherwise have limitations on repeated use, while durable goods are items accessible to the user over an extended period of time. The Company's revenue from consumable virtual goods have been insignificant over the previous three years. The Company recognizes the revenue from these items immediately, since it believes that the delivery obligation has been met and there are no further implicit or explicit performance obligations related to the purchase of that consumable virtual good. Revenue from durable virtual goods are generated

through the purchase of virtual coins by users through a Digital Storefront. Players convert the virtual coins within the game to durable virtual goods such as weapons, armor or other accessories to enhance their game-playing experience. The durable virtual goods remain in the game for as long as the player continues to play. The Company believes this represents an implied service obligation, and accordingly, recognizes the revenue from the purchase of these durable virtual goods over the estimated average playing period of paying users. Based on the Company's analysis, the estimated weighted average useful life of a paying user is approximately three months for the majority of our games, except for eight games for which the estimated weighted average useful life of a paying user has been determined to range from four to seven months primarily due to more social features and content updates in these games resulting in higher retention rates of users. If a new game is launched and only a limited period of paying player data is available, then the Company also considers other quantitative and qualitative factors, such as the playing patterns for paying users for other games with similar characteristics. While the Company believes its estimates to be reasonable based on available game player information, it may revise such estimates in the future as the games' operation periods change. Any adjustments arising from changes in the estimates of the lives of these virtual goods would be applied to the current quarter and prospectively on the basis that such changes are caused by new information indicating a change in game player behavior patterns. Any changes in the Company's estimates of useful lives of these virtual goods may result in revenue being recognized on a basis different from prior periods' and may cause its operating results to fluctuate.

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The Company also has relationships with certain advertising service providers for advertisements within smartphone games and revenue from these advertising providers is generated through impressions, clickthroughs, banner ads and offers. Revenue is recognized as advertisements are delivered and reported to the Company, an executed contract exists, the price is fixed or determinable and collectability has been reasonably assured. Delivery generally occurs when the advertisement has been displayed or the offer has been completed by the user. The fee received for certain offer advertisements that result in the user receiving virtual currency for redemption within a game are deferred and recognized over the average playing period of paying users.

## Other Estimates and Judgments

The Company estimates revenue from Digital Storefronts and advertising service providers in the current period when reasonable estimates of these amounts can be made. Certain Digital Storefronts and advertising service providers provide reliable interim preliminary reporting and others report sales data within a reasonable time frame following the end of each month, both of which allow the Company to make reasonable estimates of revenue and therefore to recognize revenue during the reporting period. Determination of the appropriate amount of revenue recognized involves judgments and estimates that the Company believes are reasonable, but it is possible that actual results may differ from the Company's estimates. When the Company receives the final reports, to the extent not received within a reasonable time frame following the end of each month, the Company records any differences between estimated revenue and actual revenue in the reporting period when the Company determines the actual amounts. Historically, the revenue on the final revenue report have not differed significantly from the reported revenue for the period.

## Principal Agent Considerations

In accordance with ASC 605-45, Revenue Recognition: Principal Agent Considerations, the Company evaluates its Digital Storefront and advertising service provider agreements in order to determine whether or not it is acting as the principal or as an agent when selling its games or when selling advertisements within its games, which it considers in determining if revenue should be reported gross or net. The Company primarily uses Digital Storefronts for distributing its smartphone games and advertising service providers for serving advertisements within its games. Key indicators that the Company evaluates to reach this determination include:

- the terms and conditions of the Company's contracts with the Digital Storefronts and advertising service providers;
- the party responsible for billing and collecting fees from the end-users, including the resolution of billing disputes;
-

whether the Company is paid a fixed percentage of the arrangement's consideration or a fixed fee for each game, transaction, or advertisement;

- the party which sets the pricing with the end-user, has the credit risk and provides customer support; and
- the party responsible for the fulfillment of the game or serving of advertisements and that determines the specifications of the game or advertisement.

Based on the evaluation of the above indicators, the Company has determined that it is generally acting as a principal and is the primary obligor to end-users for smartphone games distributed through digital storefronts and advertisements served through our advertising service providers. Therefore, the Company recognizes revenue related to these arrangements on a gross basis, when the necessary information about the gross amounts or platform fees charged, before any adjustments, are made available by the Digital Storefronts and advertising service providers.

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### Deferred Platform Commissions and Royalties

Digital Storefronts retain platform commissions and fees on each purchase made by the paying players through the Digital Storefront. The Company is also obligated to pay ongoing licensing fees in the form of royalties related to the games developed based on or significantly incorporating licensed brands, properties or other content, and the Company plans to incorporate additional licensed content in even its own originally branded games. Additionally, certain smartphone games sold through digital storefronts require the revenue to be deferred due to an implied obligation to the paying player to continue displaying the purchased virtual goods within the game over the estimated average playing period of paying players for the game. As revenue from sales to paying players through Digital Storefronts are deferred, the related direct and incremental platform commissions and fees as well as third-party royalties are also deferred and reported in “Prepaid expenses and other” on the consolidated balance sheets. The deferred platform commissions and royalties are recognized in the consolidated statements of operations in “Cost of revenue” in the period in which the related sales are recognized as revenue.

### Cash and Cash Equivalents

The Company considers all investments purchased with an original or remaining maturity of three months or less at the date of purchase to be cash equivalents. The Company deposits cash and cash equivalents with financial institutions that management believes are of high credit quality. Deposits held with financial institutions often exceed the amount of insurance on these deposits.

### Restricted Cash

Restricted cash primarily consists of deposits related to letters of credit to secure obligations under the Company’s operating lease agreements.

### Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash, cash equivalents and accounts receivable.

The Company derives its accounts receivable from revenue earned from customers or through Digital Storefronts located in the U.S. and other locations outside of the U.S. The Company performs ongoing credit evaluations of its customers' and the Digital Storefronts' financial condition and, generally, requires no collateral from its customers or the Digital Storefronts. The Company bases its allowance for doubtful accounts on management's best estimate of the amount of probable credit losses in the Company's existing accounts receivable. The Company reviews past due balances over a specified amount individually for collectability on a monthly basis. It reviews all other balances quarterly. The Company charges off accounts receivable balances against the allowance when it determines that the amount will not be recovered.

The following table summarizes the revenue from customers or aggregate purchases through Digital Storefronts in excess of 10% of the Company's revenue:

	Year Ended December 31,					
	2016		2015		2014	
Apple	52.7	%	51.7	%	52.2	%
Google	27.6	%	27.4	%	24.8	%

At December 31, 2016, Apple Inc. ("Apple") accounted for 43.9%, Google Inc. ("Google") accounted for 22.3%, Jirbo, Inc. (dba AdColony) ("Jirbo") accounted for 10.8%, and Fyber GmbH accounted for 10.5%, of total accounts receivable. At December 31, 2015, Apple accounted for 31.4%, Jirbo accounted for 26.2%, and Google accounted for 19.2% of total accounts receivable. No other customer or Digital Storefront represented more than 10% of the Company's total accounts receivable as of these dates.



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### Fair Value

The Company accounts for fair value in accordance with ASC 820, Fair Value Measurements and Disclosures (“ASC 820”). Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The Company uses a three tier hierarchy, which prioritizes the inputs used in measuring fair value as follows:

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

Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The first two levels in the hierarchy are considered observable inputs and the last is considered unobservable. The Company’s cash and cash equivalents and restricted cash, which were held in operating bank accounts, are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. The carrying value of accounts receivable and payables approximates fair value due to the short time to expected payment or receipt of cash. Please refer to Note 4 for further details.

### Prepaid or Guaranteed Licensor Royalties

The Company’s royalty expenses consist of fees that it pays to content owners for the use of their brands, properties and other licensed content, including trademarks and copyrights, in the development of the Company’s games. Royalty-based obligations are either paid in advance and capitalized on the balance sheet as prepaid royalties or accrued as incurred and subsequently paid. These royalty-based obligations are expensed to cost of revenue at the

greater of the revenue derived from the relevant game multiplied by the applicable contractual rate or an effective royalty rate based on expected net product sales.

The Company's contracts with some licensors include minimum guaranteed royalty payments, which are payable regardless of the ultimate revenue generated from end users. In accordance with ASC 440-10, Commitments ("ASC 440"), the Company recorded a minimum guaranteed liability of \$26,433 and \$36,404 as of December 31, 2016 and 2015, respectively. When no significant performance remains with the licensor, the Company initially records each of these guarantees as an asset and as a liability at the contractual amount. When significant performance remains with the licensor, the Company records royalty payments as an asset when actually paid and as a liability when incurred, rather than upon execution of the contract. The classification of minimum royalty payment obligations between long-term and short-term is determined based on the expected timing of recoupment of earned royalties calculated on projected revenue for the licensed IP games.

Each quarter, the Company evaluates the realization of its royalties as well as any recognized guarantees not yet paid to determine amounts that it deems unlikely to be realized through product sales. The Company uses estimates of revenue, cash flows and net margins to evaluate the future realization of prepaid royalties, license fees, and guarantees. This evaluation considers multiple factors, including Level 3 inputs such as the term of the agreement, forecasted demand, game life cycle status, game development plans, and current and anticipated sales levels, as well as other qualitative factors such as the success of similar games and similar genres on mobile devices published by the Company and its competitors and/or other game platforms (e.g., consoles and personal computers) utilizing the intellectual property. To the extent that this evaluation indicates that the remaining prepaid and guaranteed royalty payments are not recoverable, the

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Company records an impairment charge to cost of revenue in the period that impairment is indicated. The Company recorded impairment charges to cost of revenue of \$30,107, \$2,502, and \$257 related to prepaid guaranteed royalties and license fees paid to an affiliate of one of the Company's principal stockholders related to the Company's game, Rival Fire, guaranteed royalty payments related to certain of its celebrity license agreements, and certain other prepaid royalties during the years ended December 31, 2016, 2015, and 2014, respectively.

## Goodwill and Intangible Assets

In accordance with ASC 350, Intangibles-Goodwill and Other ("ASC 350"), the Company's goodwill is not amortized but is tested for impairment on an annual basis or whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Under ASC 350, the Company performs the annual impairment review of its goodwill balance as of September 30. This impairment review involves a multiple-step process as follows:

Step — 0 The Company evaluates qualitative factors and overall financial performance to determine whether it is necessary to perform the first step of the two-step goodwill test. This step is referred to as "Step 0." Step 0 involves, among other qualitative factors, weighing the relative impact of factors that are specific to the reporting unit as well as industry and macroeconomic factors. After assessing those various factors, if it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the entity will need to proceed to the first step of the two-step goodwill impairment test.

Step — 1 The Company compares the fair value of each of its reporting units to the carrying value including goodwill of that unit. For each reporting unit where the carrying value, including goodwill, exceeds the unit's fair value, the Company moves on to step 2. If a unit's fair value exceeds the carrying value, no further work is performed and no impairment charge is necessary.

Step — 2 The Company performs an allocation of the fair value of the reporting unit to its identifiable tangible and intangible assets (other than goodwill) and liabilities. This allows the Company to derive an implied fair value for the unit's goodwill. The Company then compares the implied fair value of the reporting unit's goodwill with the carrying value of the unit's goodwill. If the carrying amount of the unit's goodwill is greater than the implied fair value of its goodwill, an impairment charge would be recognized for the excess.

In 2016, 2015 and 2014, the Company did not record any goodwill impairment charges as it was determined that it was more likely than not that the fair values of the reporting units exceeded their respective carrying values.

Purchased intangible assets with finite lives are amortized using the straight-line method over their useful lives ranging from one to nine years and are reviewed for impairment in accordance with ASC 360, Property, Plant and Equipment (“ASC 360”).

#### Long-Lived Assets

The Company evaluates its long-lived assets, including property and equipment and intangible assets with finite lives, for impairment whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable in accordance with ASC 360. Factors considered important that could result in an impairment review include significant underperformance relative to expected historical or projected future operating results, significant changes in the manner of use of acquired assets, significant negative industry or economic trends, and a significant decline in the Company’s stock price for a sustained period of time. The Company recognizes impairment based on the difference between the fair value of the asset and its carrying value. Fair value is generally measured based on either quoted market prices, if available, or a discounted cash flow analysis.

#### Property and Equipment

The Company states property and equipment at cost. The Company computes depreciation or amortization using the straight-line method over the estimated useful lives of the respective assets or, in the case of leasehold improvements, the lease term of the respective assets, whichever is shorter.

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The depreciation and amortization periods for the Company's property and equipment are as follows:

Computer equipment	Three years
Computer software	Three years
Furniture and fixtures	Three years
Leasehold improvements	Shorter of the estimated useful life or remaining term of lease

### Research and Development Costs

The Company charges costs related to research, design and development of products to research and development expense as incurred. The types of costs included in research and development expenses include salaries, third party development cost, contractor fees and allocated facilities costs.

### Software Development Costs

The Company applies the principles of ASC 985-20, Software-Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed ("ASC 985-20"). ASC 985-20 requires that software development costs incurred in conjunction with product development be charged to research and development expense until technological feasibility is established. Thereafter, until the product is released for sale, software development costs must be capitalized and reported at the lower of unamortized cost or net realizable value of the related product. The Company has adopted the "tested working model" approach to establishing technological feasibility for its games. Under this approach, the Company does not consider a game in development to have passed the technological feasibility milestone until the Company has completed a model of the game that contains essentially all the functionality and features of the final game and has tested the model to ensure that it works as expected. To date, the Company has not incurred significant costs between the establishment of technological feasibility and the release of a game for sale; thus, the Company has expensed all software development costs as incurred. The Company considers the following factors in determining whether costs can be capitalized: the uncertainty regarding a game's revenue-generating potential and its historical practice of canceling games at any stage of the development process.

### Internal Use Software

The Company recognizes internal use software development costs in accordance with ASC 350-40, Intangibles-Goodwill and Other-Internal Use Software ("ASC 350-40") and ASU 2015-05, Cloud Computing

Arrangements. The Company capitalizes software development costs, including costs incurred to purchase third-party software, beginning when it determines certain factors are present including, among others, that technology exists to achieve the performance requirements and/or buy versus internal development decisions have been made. The Company capitalized certain internal use software costs totaling approximately \$728, \$615 and \$2,165 during the years ended December 31, 2016, 2015, and 2014, respectively. The estimated useful life of costs capitalized is generally three years. During the years ended December 31, 2016, 2015 and 2014, the amortization of capitalized software costs totaled approximately \$998, \$1,155 and \$950, respectively. Capitalized internal use software development costs are included in property and equipment, net.

## Income Taxes

In November 2015, the FASB issued ASU 2015-17, "Balance Sheet Classification of Deferred Taxes." This update requires an entity to classify deferred tax liabilities and assets as noncurrent within a classified statement of financial position. ASU 2015-17 is effective for annual reporting periods, and interim periods therein, beginning after December 15, 2016. This update may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. Early application is permitted as of the beginning of the interim or annual reporting period. The Company adopted ASU 2015-17 on a prospective basis as of December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on the Company's consolidated financial statements.

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The Company accounts for income taxes in accordance with ASC 740, Income Taxes (“ASC 740”), which requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in its financial statements or tax returns. Under ASC 740, the Company determines deferred tax assets and liabilities based on the temporary difference between the financial statement and tax bases of assets and liabilities using the enacted tax rates in effect for the year in which it expects the differences to reverse. The Company establishes valuation allowances when necessary to reduce deferred tax assets to the amount it expects to realize.

The Company accounts for uncertain tax positions in accordance with ASC 740, which requires companies to adjust their financial statements to reflect only those tax positions that are more-likely-than-not to be sustained. ASC 740 prescribes a comprehensive model for the financial statement recognition, measurement, presentation and disclosure of uncertain tax positions taken or expected to be taken in income tax returns. The Company’s policy is to recognize interest and penalties related to unrecognized tax benefits in income tax expense.

## Restructuring

The Company accounts for costs associated with employee terminations and other exit activities in accordance with ASC 420, Exit or Disposal Cost Obligations (“ASC 420”). The Company records employee termination benefits as an operating expense when it communicates the benefit arrangement to the employee and it requires no significant future services, other than a minimum retention period, from the employee to earn the termination benefits.

## Stock-Based Compensation

The Company applies the fair value provisions of ASC 718, Compensation-Stock Compensation (“ASC 718”). ASC 718 requires the recognition of compensation expense, using a fair-value based method, for costs related to all share-based payments including stock options and restricted stock units (“RSUs”). ASC 718 requires companies to estimate the fair value of stock-option awards on the grant date using an option pricing model. The fair value of stock options and stock purchase rights granted pursuant to the Company’s equity incentive plans and 2007 Employee Stock Purchase Plan (“ESPP”), respectively, is determined using the Black-Scholes valuation model. The determination of fair value is affected by the stock price, as well as assumptions regarding subjective and complex variables such as expected employee exercise behavior and expected stock price volatility over the expected term of the award. Generally, these assumptions are based on historical information and judgment is required to determine if historical trends may be indicators of future outcomes. Employee stock-based compensation expense is calculated based on awards ultimately expected to vest and is reduced for estimated forfeitures. Forfeitures are revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates and an adjustment to stock-based compensation expense will be recognized at that time. Changes to the assumptions used in the Black-Scholes option valuation calculation and the forfeiture rate, as well as future equity granted or assumed through acquisitions could significantly impact the compensation expense the Company recognizes. The cost of RSUs is determined using the fair value of the Company’s

common stock based on the quoted closing price of the Company's common stock on the date of grant, and is reduced for estimated forfeitures. The compensation cost for all share-based payment awards is amortized on a straight-line basis over the requisite service period.

The Company has elected to use the "with and without" approach under which windfall benefit is recognized only if an incremental benefit is provided after considering all other tax attributes presently available to the Company. As a result, the Company will only recognize a tax benefit from stock-based awards in additional paid-in capital if an incremental tax benefit is realized after all other tax attributes currently available to the Company have been utilized. In addition, the Company has elected to account for the indirect effects of stock-based awards on other tax attributes, such as the research tax credit, through its statement of operations.

The Company accounts for equity instruments issued to non-employees in accordance with the provisions of ASC 718 and ASC 505-50.



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### Advertising Expenses

The Company expenses the production costs of advertising, including direct response advertising, the first time the advertising takes place. Advertising expense was \$37,408, \$38,481 and \$35,169 in the years ended December 31, 2016, 2015 and 2014, respectively.

### Comprehensive Income/(loss)

Comprehensive income/(loss) consists of two components, net income/(loss) and other comprehensive income/(loss). Other comprehensive income/(loss) refers to revenue, expenses, gains and losses that under GAAP are recorded as an element of stockholders' equity but are excluded from net income/(loss). The Company's other comprehensive income/(loss) included foreign currency translation adjustments from those subsidiaries not using the U.S. Dollar as their functional currency, and a reclassification to net loss from the write-off of cumulative translation adjustment.

### Foreign Currency Translation

In preparing its consolidated financial statements, the Company translates the financial statements of its foreign subsidiaries from their functional currencies, the local currency, into U.S. Dollars. This process resulted in unrealized exchange gains and losses, which are included as a component of accumulated other comprehensive loss within stockholders' deficit. However, if the functional currency is deemed to be the U.S. Dollar, any gain or loss associated with the translation of these financial statements would be included in other expense within the Company's consolidated statements of operations.

Cumulative foreign currency translation adjustments include any gain or loss associated with the translation of a subsidiary's financial statements when the functional currency of a subsidiary is the local currency. If the Company disposes of any of its subsidiaries, any cumulative translation gains or losses would be realized and recorded in other expense within the Company's consolidated statement of operations in the period during which the disposal occurs. If the Company determines that there has been a change in the functional currency of a subsidiary relative to the U.S. Dollar, any translation gains or losses arising after the date of change would be included in other expense within the Company's consolidated statement of operations.

### Business Combination

The Company applies the accounting standard related to business combinations, ASC 805, Business Combinations (“ASC 805”). The standard requires recognition of assets acquired, liabilities assumed, and contingent consideration at their fair value on the acquisition date with subsequent changes recognized in earnings; requires acquisition-related expenses and restructuring costs to be recognized separately from the business combination and expensed as incurred; requires in-process research and development to be capitalized at fair value as an indefinite-lived intangible asset until completion or abandonment; and requires that changes in accounting for deferred tax asset valuation allowances and acquired income tax uncertainties after the measurement period be recognized as a component of provision for taxes.

The Company accounts for acquisitions of entities or assets that include inputs and processes and have the ability to create outputs as business combinations. The purchase price of the acquisition is allocated to tangible assets, liabilities, and identifiable intangible assets acquired based on their estimated fair values. The excess of the purchase price over those fair values is recorded as goodwill. Acquisition-related expenses and restructuring costs are expensed as incurred. While the Company uses its best estimates and assumptions as a part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the business combination date, these estimates and assumptions are inherently uncertain and subject to refinement. As a result, during the preliminary purchase price allocation period, which may be up to one year from the business combination date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. After the preliminary purchase price allocation period, the Company records adjustments to assets acquired or liabilities assumed subsequent to the purchase price allocation period in its operating results in the period in which the adjustments were determined.

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Recent Accounting Pronouncements

In August 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-15, Presentation of Financial Statements – Going Concern (Subtopic 205-40). This amendment requires management to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the entity’s ability to continue as a going concern, which evaluation is currently performed by the external auditors. Management will be required to perform this assessment for both interim and annual reporting periods and must make certain disclosures if it concludes that substantial doubt exists. This amendment is effective for annual and interim periods ending after December 15, 2016. The adoption of this standard did not have any effect on the Company’s consolidated financial statements for the year ended December 31, 2016 as no substantial doubt exists about the Company’s ability to continue as a going concern.

In January 2017, the FASB issued ASU 2017-04, Intangibles—Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment. This new accounting standard update simplifies the measurement of goodwill by eliminating the Step 2 impairment test. Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit’s goodwill with the carrying amount of that goodwill. The new guidance requires an entity to compare the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. The new guidance becomes effective for goodwill impairment tests in fiscal years beginning after December 15, 2019, though early adoption is permitted. The Company is currently assessing the impact of this new guidance.

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations (Topic 805), which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The standard will be effective in the first quarter of fiscal 2019. Early adoption is permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In December 2016, the FASB issued ASU No. 2016-19, Technical Corrections and Improvements. The amendments in ASU 2016-19 represent changes to clarify the accounting standard codification, correct unintended application of guidance, or make minor improvements to the accounting standards codification that are not expected to have a significant effect on current accounting practice or create a significant administrative cost to most entities. For public companies, the standard is effective immediately for amendments that do not have transition guidance. Amendments that are subject to transition guidance, the effective date is interim and annual reporting periods beginning after December 15, 2016. The Company is currently evaluating the impact of those amendments on its consolidated financial statements. The Company adopted the standard immediately upon issuance for amendments that do not have transition guidance. The adoption of the standard did not have an impact on the Company’s consolidated financial

statements.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires amounts generally described as restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown in the statement of cash flows. The standard will be effective in the first quarter of fiscal 2018. Early adoption is permitted. The Company is currently evaluating the impact of this standard on its consolidated financial statements.

In October 2016, the FASB issued Accounting Standards Update (“ASU”) 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory. ASU 2016-16 requires that an entity recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The guidance will be effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company is currently evaluating the effect that the updated standard will have on its consolidated financial statements.

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In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. ASU 2016-15 addresses eight specific cash flow issues with the objective of reducing existing diversity in practice. The guidance will be effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017. The Company is currently evaluating the effect that the updated standard will have on its consolidated financial statements.

In March 2016, the FASB issued ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. The new guidance, which simplifies the accounting and presentation for share-based payments, provides for a number of amendments which impact the accounting for income taxes and the accounting for forfeitures. ASU 2016-09 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2016 and requires varied adoption methods for each respective amendment. The Company will adopt this standard in the first quarter of 2017. It is currently working with its stock administrator to determine the exact quantitative impact of the revised standard; however the Company believes that the impact will be limited to a true up entry between additional paid-in capital and retained earnings with no impact to the income statement. Additionally, the Company plans to make a policy election to account for forfeitures as they occur.

In February 2016, the FASB issued ASU 2016-02, Leases. The guidance requires lessees to recognize most leases as assets and liabilities on the balance sheet. Qualitative and quantitative disclosures will be enhanced to better understand the amount, timing and uncertainty of cash flows arising from leases. The guidance is effective for annual and interim periods beginning after December 31, 2018. The updated standard mandates a modified retrospective transition method with early adoption permitted. The Company is currently evaluating the effect that the updated standard will have on its consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, Financial Instruments - Overall - Recognition and Measurement of Financial Assets and Financial Liabilities. The guidance requires entities to measure equity investments that do not result in consolidation and are not accounted for under the equity method at fair value and recognize any changes in fair value in net income unless the investments qualify for a practicability exception. The updated standard is effective for interim and annual reporting periods beginning after December 15, 2017. The Company is currently evaluating the effect that the updated standard will have on its consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17 Balance Sheet Classification of Deferred Taxes. The guidance requires that deferred tax assets and liabilities be classified as noncurrent in a classified statement of financial position. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016. Early adoption is permitted. The Company early adopted this guidance on a prospective basis as of December 31, 2015. The adoption of this guidance did not have a material impact on the Company's consolidated financial statements. See "Note 10 - Income Taxes" for additional information.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers. Under the standard, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The new standard is effective for annual reporting periods, and interim periods within those annual periods, beginning after December 15, 2017, with early adoption permitted for annual reporting periods beginning after December 15, 2016. The Company does not plan to early adopt, and accordingly, will adopt the new standard effective January 1, 2018. The FASB recently issued several amendments to the standard, including clarifications on disclosure of prior-period performance obligations and remaining performance obligations.

The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (the cumulative catch-up transition method). The Company has not yet selected a transition method.

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The Company is in initial stages of evaluation of the impact of the new standard on its accounting policies, processes, and system requirements. It has assigned internal resources in addition to the engagement of third party service providers to assist in the evaluation. While the Company is continuing to assess all potential impacts of this standard, it will continue to be considered the principal in its transactions and is the primary obligor to end-users for smartphone games distributed through digital storefronts and advertisements served through its advertising service providers. Therefore, revenue related to these arrangements will continue to be recognized on a gross basis, if the necessary information about the gross amounts or platform fees charged, before any adjustments, are made available to the Company by the digital storefronts and advertising service providers.

## NOTE 2 — NET (LOSS)/INCOME PER SHARE

The Company computes basic net income/(loss) per share by dividing its net income/(loss) for the period by the weighted average number of common shares outstanding during the period less the weighted average common shares subject to restrictions imposed by the Company. Diluted net income/(loss) per share reflects the potential dilution that could occur from common shares issuable through stock-based compensation plans (including stock options, RSUs and common stock issuable through the Company's ESPP), and warrants by application of the treasury stock method.

	Year Ended December 31,		
	2016	2015	2014
Net (loss)/income	\$ (87,440)	\$ (7,185)	\$ 8,148
Basic and diluted shares used to compute net (loss)/income per share:			
Weighted average common shares outstanding	132,808	122,414	93,575
Weighted average common shares subject to restrictions	(1,004)	(3,639)	(1,749)
Weighted average shares used to compute basic net (loss)/income per share	131,804	118,775	91,826
Dilutive potential common shares	—	—	5,096
Weighted average shares used to compute diluted net (loss)/income per share	131,804	118,775	96,922
Basic net (loss)/income per share	(0.66)	(0.06)	0.09
Diluted net (loss)/income per share	(0.66)	(0.06)	0.08

The following weighted average options to purchase common stock, warrants to purchase common stock, shares of common stock subject to restrictions and RSUs have been excluded from the computation of diluted net income/(loss) per share of common stock for the periods presented because including them would have had an anti-dilutive effect:

	Year Ended December 31,		
	2016	2015	2014
Warrants to purchase common stock	4,267	3,832	2,362
Unvested common shares subject to restrictions	1,004	3,639	1,596
Options to purchase common stock	8,490	6,804	6,347
RSUs	7,688	5,776	2,746
	\$ 21,449	\$ 20,051	\$ 13,051

### NOTE 3 — BUSINESS COMBINATIONS

#### Crowdstar Inc.

On November 2, 2016, the Company, acquired shares representing approximately 80.6% of the issued and outstanding voting power of Crowdstar Inc., a Delaware corporation (“Crowdstar”), from Time Warner Inc., Intel Capital Corporation and certain other stockholders of Crowdstar (the “Participating Stockholders”). Crowdstar is a developer of fashion and home decor genre games for mobile devices based in Burlingame, California. The Company acquired Crowdstar to leverage its casual games expertise, assembled workforce and existing mobile games in order to expand the Company’s game offerings on smartphones and tablets. The Company paid approximately \$40,794 in cash to the Participating Holders in exchange for the acquired shares. In addition, certain drag-along provisions specified in a voting agreement by and among Crowdstar and certain other stockholders of Crowdstar were triggered. Pursuant to the drag-



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along provisions, certain other stockholders of Crowdstar were required to tender their Crowdstar capital stock to the Company on the same terms as the Participating Holders. Upon acquiring over 90% of the issued and outstanding voting power of Crowdstar pursuant to the drag-along provisions, on December 6, 2016, the Company acquired the remaining issued and outstanding shares of Crowdstar in a short-form merger under the laws of the State of Delaware for an additional \$4,667 for a total of \$45,461, and, for 100% ownership of Crowdstar.

The preliminary allocation of the purchase price is based on valuations derived from estimated fair value assessments and assumptions used by the Company. While the Company believes that its estimates and assumptions underlying the valuations are reasonable, different estimates and assumptions could result in different valuations assigned to the individual assets acquired and liabilities assumed, and the resulting amount of goodwill. The following table summarizes the preliminary fair values of assets acquired and liabilities assumed at the date of acquisition:

Assets acquired:	
Cash and cash equivalents	\$ 4,492
Accounts receivable	3,905
Prepaid expenses	521
Other current assets	34
Fixed assets	315
Intangible assets:	
Titles, content and technology	16,000
Goodwill	28,776
Total assets	54,043
Liabilities assumed:	
Accounts payable	(584)
Accrued liabilities	(4,284)
Deferred revenue	(1,500)
Note payable - current portion	(1,279)
Long term liabilities	(935)
Total liabilities assumed	(8,582)
Net acquired assets	\$ 45,461

Acquisition-related intangibles included in the above table are finite-lived and are being amortized on a straight-line basis over their estimated lives of three to five years, which approximates the pattern in which the economic benefits of the intangible assets are expected to be realized. Of the total purchase price, \$16,000 was allocated to identifiable intangible assets. Pursuant to ASC 805, the Company incurred and expensed a total of \$802 in acquisition and transitional costs associated with the acquisition of Crowdstar during the year ended December 31, 2016, respectively, which were primarily general and administrative related.

The Company allocated the residual value of \$28,776 to goodwill. Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. In accordance with ASC 350, goodwill will not be amortized but will be tested for impairment at least annually. Goodwill created as a result of the Crowdstar acquisition is not deductible for tax purposes.

Plain Vanilla, Corp.

On December 19, 2016, the Company acquired substantially all of the intangible assets and certain other assets of Plain Vanilla Corp., (“Plain Vanilla”), the developer of the QuizUp interactive software application for mobile devices, based in Reykjavik, Iceland. The Company acquired Plain Vanilla to leverage its casual games expertise and existing mobile game in order to expand the Company’s game offerings on smartphones and tablets.

The Company agreed to forgive and cancel \$7.5 million in aggregate principal amount of convertible promissory notes of Plain Vanilla held by Glu, and all interest thereon, in exchange for acquiring the QuizUp assets and technology and other receivables. The deemed fair value of the consideration as of the acquisition date was determined to be \$3,200. The acquired assets represent a business as defined in ASC 805, Business Combinations. The Company has integrated the

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acquired assets into the Company's existing business. The asset purchase agreement also contains customary representations, warranties and covenants, including non-competition and indemnification provisions.

The allocation of the purchase price is based on valuations derived from estimated fair value assessments and assumptions used by the Company. While the Company believes that its estimates and assumptions underlying the valuations are reasonable, different estimates and assumptions could result in different valuations assigned to the individual assets acquired. The following table summarizes the preliminary fair values of assets acquired at the date of acquisition:

Fair value of purchase consideration:	\$ 3,200
Assets acquired:	
Cash	\$ 1,200
Accounts receivable	183
Intangible assets:	
Title, content and technology	1,817
Total Assets acquired	\$ 3,200

Acquisition-related intangibles included in the above table are finite-lived and are being amortized on a straight-line basis over their estimated lives of three years, which approximates the pattern in which the economic benefits of the intangible assets are expected to be realized. Of the total purchase price, \$1,817 was allocated to identifiable intangible assets. No residual value was allocated to Goodwill.

#### Cie Games, Inc.

On August 20, 2014, the Company completed its acquisition of Cie Games, Inc. ("Cie Games"), a developer of racing genre mobile games based in Long Beach, California. The Company acquired Cie Games' to leverage its racing genre expertise, assembled workforce and existing mobile games in order to expand the Company's game offerings on smartphones and tablets. The purchase price consideration included 9,983 shares of the Company's common stock valued at \$5.09 per share as of the closing date of the acquisition, for an aggregate of \$50,813 in share consideration. In addition, the Company agreed to pay approximately \$29,495 in cash consideration, of which \$1,914 was paid during the year ended December 31, 2015, for total overall consideration paid of \$80,308. In March 2016 the Company released 2,139 of the 9,983 shares issued in the acquisition that were heldback for 18 months and 30 days from the closing off the acquisition to satisfy potential indemnification claims under the merger agreement for the acquisition. All outstanding Cie Games capital stock and stock options were cancelled at the closing of the acquisition.

Acquisition-related intangible assets are finite-lived and are being amortized on a straight-line basis over their estimated lives of three to five years, which approximates the pattern in which the economic benefits of the intangible assets are expected to be realized. Of the total purchase price, \$23,500 was allocated to identifiable intangible assets. Pursuant to ASC 805, Business Combinations (“ASC 805”), for the twelve months ended December 31, 2016 and 2015, the Company incurred \$0 and \$0, of acquisition and transitional costs associated with the acquisition of Cie Games.

#### PlayFirst, Inc.

On May 14, 2014, the Company completed the acquisition of PlayFirst, Inc. (“PlayFirst”), a developer of casual games for smartphones and tablets based in San Francisco, California. The Company acquired PlayFirst to leverage its casual game expertise, assembled workforce and existing mobile games in order to expand the Company’s game offerings on smartphones and tablets.

The purchase price consideration was \$11,553, representing 2,955 shares of the Company’s common stock valued at \$3.91 per share as of the closing date of the acquisition. The number of shares comprising the purchase price consideration was reduced from 3,000 shares to 2,955 shares due to a working capital adjustment. In addition, the Company withheld a total of 106 shares to cover stockholders’ agent expenses and tax obligations of certain PlayFirst stockholders, which resulted in the Company issuing a total of 2,849 shares valued at \$11,141 and paying \$412 in cash. In July 2016, the Company released all 1,500 of the 2,849 shares issued in the acquisition were held in escrow for 24 months

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and 60 days from the closing date to satisfy potential indemnification claims under the PlayFirst merger agreement. In addition, the Company assumed approximately \$3,480 of PlayFirst net liabilities. All outstanding PlayFirst capital stock, stock options and warrants were cancelled at the closing of the PlayFirst acquisition.

Acquisition-related intangible assets are finite-lived and are being amortized on a straight-line basis over their estimated lives of three to five years, which approximates the pattern in which the economic benefits of the intangible assets are expected to be realized. Of the total purchase price, \$3,700 was allocated to identifiable intangible assets. Pursuant to ASC 805, the Company incurred and expensed a total of \$917 in acquisition and transitional costs associated with the acquisition of PlayFirst during the year ended December 31, 2014, respectively, which were primarily general and administrative related.

### Valuation Methodology

The Company engaged a third party valuation firm to aid management in its analyses of the fair value of Crowdstar, Plain Vanilla, Cie Games and Play First. All estimates, key assumptions and forecasts were either provided by or reviewed by the Company. While the Company chose to utilize a third party valuation firm, the fair value analyses and related valuations represent the conclusions of management and not the conclusions or statements of any third party.

The Company valued titles, content and technology, and in-process research and development primarily using the Multi-Period Excess Earnings (“MPEE”) method of the income approach and key assumptions used included: projected revenue, cost of goods sold, and operating expenses for Crowdstar, Cie Games and Play First legacy titles, the future amortization tax benefit of the legacy titles, and a discount rate of between 20% and 35%.

The fair value of Crowdstar’s deferred revenue was determined to be \$1,500 as of the valuation date. This was valued using the estimated costs including hosting fees and salaries and benefits to support the contractual obligations associated with these revenue, plus a market participant margin. The deferred revenue will be recognized on a straight-line basis over 9 months.

As of the valuation dates, Crowdstar and Playfirst were in process of developing games, which were launched in the fourth quarter of 2016 and the fourth quarter of 2014, respectively.

The Company valued customer relationships using the replacement cost method of the cost approach and based on the perceived value that a market participant would ascribe to the PlayFirst and Cie Games customer relationships, which include existing relationships with Amazon, Apple and Google. Key assumptions used in valuing customer relationships included legal fees and opportunity costs in re-establishing such relationships.

### Pro Forma Financial Information

The results of operations for Crowdstar and Plain Vanilla and the estimated fair market values of the assets acquired and liabilities assumed have been included in the Company’s consolidated financial statements since their respective dates of acquisition. For the year ended December 31, 2016 and since the dates of their respective acquisition, Crowdstar and Plain Vanilla contributed approximately \$2,111 to the Company’s gross revenue and increased net losses by \$9,194. The unaudited pro forma financial information in the table below summarizes the combined results of the Company’s operations and those of Crowdstar and Plain Vanilla for the periods shown as if the acquisition of

Crowdstar and Plain Vanilla had each occurred on January 1, 2015. The pro forma financial information includes the business combination accounting effects of the acquisition, including amortization charges from acquired intangible assets. The pro forma financial information presented below is for informational purposes only, and is subject to a number of estimates, assumptions and other uncertainties.

	Year ended December 31, (unaudited)	
	2016	2015
Total pro forma revenue	\$ 245,484	\$ 287,828
Pro forma net loss	(98,863)	(28,154)
Pro forma net loss per share - basic	(0.75)	(0.24)
Pro forma net loss per share - diluted	(0.75)	(0.24)

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The results of operations for PlayFirst and Cie Games and the estimated fair market values of the assets acquired and liabilities assumed have been included in the Company's consolidated financial statements since their respective dates of acquisition. For the year ended December 31, 2014 and since the dates of their respective acquisition, PlayFirst and Cie Games contributed approximately \$13,601 to the Company's gross revenue and increased net losses by \$315. The unaudited pro forma financial information in the table below summarizes the combined results of the Company's operations and those of PlayFirst and Cie Games for the periods shown as if the acquisition of PlayFirst and Cie Games had each occurred on January 1, 2014. The pro forma financial information includes the business combination accounting effects of the acquisition, including amortization charges from acquired intangible assets. The pro forma financial information presented below is for informational purposes only, and is subject to a number of estimates, assumptions and other uncertainties.

	December 31, 2014 (unaudited)
Total pro forma revenue	\$ 243,971
Pro forma net income	2,800
Pro forma net income per share— basic	0.03
Pro forma net income per share— diluted	0.03

## NOTE 4 — FAIR VALUE MEASUREMENTS

## Fair Value Measurements

The Company accounts for fair value in accordance with ASC 820, Fair Value Measurements and Disclosures ("ASC 820"). Fair value is defined under ASC 820 as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value under ASC 820 must maximize the use of observable inputs and minimize the use of unobservable inputs. The Company uses a three-tier hierarchy, which prioritizes the inputs used in measuring fair value as follows:

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

Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

As of December 31, 2016, the Company's financial assets and financial liabilities are presented below at fair value and were classified within the fair value hierarchy as follows (in thousands):

	Level 1	Level 2	Level 3	December 31, 2016
Financial Assets				
Cash and cash equivalents	\$ 102,102	\$ —	\$ —	\$ 102,102
Restricted cash	1,312	—	—	1,312
Total Financial Assets	\$ 103,414	\$ —	\$ —	\$ 103,414



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As of December 31, 2015, the Company's financial assets and financial liabilities are presented below at fair value and were classified within the fair value hierarchy as follows (in thousands):

	Level 1	Level 2	Level 3	December 31, 2015
Financial Assets				
Cash and cash equivalents	\$ 180,542	\$ —	\$ —	\$ 180,542
Restricted cash	1,498	—	—	1,498
Total Financial Assets	\$ 182,040	\$ —	\$ —	\$ 182,040

The Company's cash and cash equivalents, which were held in operating bank accounts, are classified within Level 1 of the fair value hierarchy because they are valued using quoted market prices, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. In addition, the Company's restricted cash is classified within Level 1 of the fair value hierarchy. The carrying value of accounts receivable and payables approximates fair value due to the short time to expected payment or receipt of cash.

## NOTE 5 — INVESTMENTS

In January 2016, the Company announced an investment of up to \$7,500 in promissory notes convertible into a minority equity stake in Plain Vanilla. \$5,000 was paid in January 2016 and the remaining \$2,500 was paid in May 2016. As part of the investment, the Company also received a call option to acquire all outstanding equity of Plain Vanilla for 15 months from the closing of the initial investment, unless earlier terminated by the Company, at a pre-agreed price. Plain Vanilla is the Icelandic developer of the mobile game QuizUp, and is financed primarily through equity investments.

On December 19, 2016, the Company acquired substantially all of the intangible assets and certain other assets of Plain Vanilla in exchange of forgiveness and cancellation of \$7.5 million in aggregate principal amount of convertible promissory notes and all interest thereon. The call option agreement was terminated as of that date. See "Note 3 – Business Combinations" for additional details.

The Company elected for the fair value option to account for its investment in the promissory notes. The call option was recorded at cost. As of the investment dates, the fair values of the promissory notes and the call option were determined to be \$5,100 and \$2,400, respectively. The Company computed the fair value of the promissory notes as of

the business acquisition date of December 19, 2016 to be \$3,200. Due to the decrease in the fair market value of the promissory notes from the initial investment date until the business acquisition date, the Company recorded a charge of \$1,900 in other expense for the year ended December 31, 2016. Due to a decline in the forecasted revenue and future cash flow outlook of Plain Vanilla during the second and third quarters of 2016, the fair value of the call option was estimated to be nil as of September 30, 2016, which resulted in the Company recording an impairment charge of \$2,400 in other expense.

The following table presents the changes in fair value of the Plain Vanilla promissory notes and the call option:

	Year ended December 31, 2016				Fair value of purchase consideration for business acquisition	Asset at the end of the period
	Asset at the beginning of the period	Additions	Impairment of cost method investment	Decrease in fair value		
Convertible promissory note investment in Plain Vanilla Corp.	\$ —	\$ 5,100	\$ —	\$ (1,900)	\$ (3,200)	\$ —
Call option to acquire Plain Vanilla Corp.	\$ —	\$ 2,400	\$ (2,400)	—	\$ —	\$ —

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The Company engaged third party valuation experts to aid management in its analysis of the fair value of the promissory notes issued to the Company in each of January 2016 and May 2016 by, and the Company's option to acquire all of the outstanding equity ("call option") of, Plain Vanilla Corp. ("Plain Vanilla"). During the second and third quarters of 2016, the fair value of the promissory notes was estimated using a probability weighted assessment of the expected cash flows discounted to their present value. The fair value of the promissory notes as of the business acquisition date of December 19, 2016 was assessed using the expected revenue and applicable market multiples. The fair value of the call option prior to impairment in the third quarter was estimated using the Black-Scholes valuation model. The Black-Scholes valuation model requires inputs such as the expected term of the call option, expected volatility and risk-free interest rate. Certain of these inputs are subjective and require significant analysis and judgment to develop. The weighted average assumptions used by the Company are noted in the following table:

	Nine Months Ended September 30, 2016
Dividend yield	—
Risk-free interest rate	0.41
Expected volatility	63.88
Expected term (in years)	0.68

Plain Vanilla, prior to acquisition of its assets by the Company, was a VIE. However, the Company determined that it was not the primary beneficiary of this VIE since the Company did not have the power to direct the activities of this VIE that most significantly impacted its economic performance. This determination was based on the following factors: (i) the development stage of VIE products; (ii) the Company's inability to exercise control or decision making power over the VIE, as well as its lack of involvement in day-to-day operations and management decisions; and (iii) the fact that the call option to acquire Plain Vanilla, before the acquisition of its assets by the Company, was significantly out of the money.

In January 2016, the Company acquired a minority equity stake and entered into a commercial agreement with Dairy Free Games, Inc. ("Dairy Free"). As part of the arrangement, the Company invested \$2,000 in Dairy Free's Series A preferred stock. The Company also agreed to provide up to \$1,000 of recoupable and non-refundable development funding for a mobile game under development by Dairy Free. The development funding is payable in installments upon Dairy Free achieving certain milestones. Dairy Free is the developer of mobile video games and is financed primarily through equity investments.

Dairy Free is a VIE; however, the Company has determined that it is not the primary beneficiary of this VIE since the Company currently does not have the power to direct the activities of this VIE that most significantly impact its economic performance. The Company made this determination based on the following factors: (i) the development stage of VIE's products; and (ii) the Company's inability to exercise control or decision making power over the VIE,

based on the Company's ownership percentage and voting rights, as well as its lack of involvement in day-to-day operations and management decisions.

For Dairy Free, the preferred stock investment was recorded at cost. As of the investment date and as of December 31, 2016, the preferred stock investment was recorded at \$2,000 in other long-term assets. The development funding was fully recognized as research and development expense during the year ended December 31, 2016.

The Company is not obligated to provide any explicit or implicit financial or other support to Dairy Free other than what was contractually agreed to in the investment agreement. The Company has no exposure to loss beyond its investments in Dairy Free. The Company evaluates its cost method investments for impairment on a quarterly basis. If the Company has not identified events or changes in circumstances that may have a significant adverse effect on the fair value of a cost method investment, then the fair value of such cost method investment is not estimated.

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## NOTE 6 — BALANCE SHEET COMPONENTS

## Accounts Receivable

	December 31,	
	2016	2015
Accounts receivable	\$ 22,314	\$ 18,672
Less: Allowance for doubtful accounts	(837)	(716)
	\$ 21,477	\$ 17,956

Accounts receivable include amounts billed and unbilled as of the respective balance sheet dates, but net of platform commissions to the Company's digital storefronts.

The movement in the Company's allowance for doubtful accounts is as follows:

Description	Balance at Beginning of Year	Additions	Deductions	Balance at End of Year
Year ended December 31, 2016	\$ 716	\$ 168	\$ (47)	\$ 837
Year ended December 31, 2015	\$ 297	\$ 419	\$ -	\$ 716
Year ended December 31, 2014	\$ 459	\$ 219	\$ (381)	\$ 297

The Company had no significant write-offs or recoveries during the years ended December 31, 2016, 2015, and 2014.

Prepaid expenses and other

	December 31,	
	2016	2015
Deferred platform commission fees	11,571	7,675
Deferred royalties	3,275	2,668
Taxes receivable	63	759
Other	4,077	3,739
	\$ 18,986	\$ 14,841

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## Property and Equipment

	December 31,	
	2016	2015
Computer equipment	\$ 7,085	\$ 6,106
Furniture and fixtures	1,054	1,053
Software	8,180	7,408
Leasehold improvements	4,955	3,661
	21,274	18,228
Less: Accumulated depreciation and amortization	(15,634)	(12,781)
	\$ 5,640	\$ 5,447

Depreciation for the years ended December 31, 2016, 2015 and 2014 was \$2,947, \$2,861 and \$2,513, respectively.

## Other Long-Term Liabilities

	December 31,	
	2016	2015
Deferred rent	\$ 619	\$ 692
Uncertain tax position obligations	718	567
Other	177	326
	\$ 1,514	\$ 1,585

## NOTE 7 — GOODWILL AND INTANGIBLE ASSETS

## Intangible Assets

The carrying amounts and accumulated amortization expense of the acquired intangible assets, including the impact of foreign currency exchange translation, at December 31, 2016 and December 31, 2015 were as follows:

		December 31, 2016			December 31, 2015		
		Gross Carrying Value	Accumulated Amortization Expense	Net Carrying Value	Gross Carrying Value	Accumulated Amortization Expense	Net Carrying Value
		(Including Impact of Foreign Exchange)	(Including Impact of Foreign Exchange)	(Including Impact of Foreign Exchange)	(Including Impact of Foreign Exchange)	(Including Impact of Foreign Exchange)	(Including Impact of Foreign Exchange)
Estimated Useful Life							
Intangible assets amortized to cost of revenue:							
Titles, content and technology	3 - 5 yrs	\$ 40,942	\$ (19,255)	\$ 21,687	\$ 34,750	\$ (22,954)	\$ 11,796
Catalogs	1 yr	—	—	—	1,152	(1,152)	—
ProvisionX							
Technology	6 yrs	—	—	—	190	(190)	—
Carrier contract and related relationships	5 yrs	14,029	(11,427)	2,602	24,200	(20,597)	3,603
Licensed content	2.5 - 5 yrs	2,334	(2,334)	—	7,866	(2,866)	5,000
Service provider license	9 yrs	212	(212)	—	454	(406)	48
Trademarks	7 yrs	5,117	(3,510)	1,607	5,217	(2,897)	2,320
		62,634	(36,738)	25,896	73,829	(51,062)	22,767
Other intangible assets amortized to operating expenses:							
Emux							
Technology	6 yrs	—	—	—	1,228	(1,228)	—
Non-compete agreements	4 yrs	—	—	—	5,391	(5,391)	—
		—	—	—	6,619	(6,619)	—
Total intangibles assets		\$ 62,634	\$ (36,738)	\$ 25,896	\$ 80,448	\$ (57,681)	\$ 22,767





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Acquisition-related intangibles included in the above table are finite-lived and are being amortized on a straight-line basis over their estimated lives, which approximates the pattern in which the economic benefits of the intangible assets are realized. The Company has included amortization of acquired intangible assets directly attributable to revenue-generating activities in cost of revenue. The Company has included amortization of acquired intangible assets not directly attributable to revenue-generating activities in operating expenses.

During the year ended December 31, 2016, the Company wrote-off fully amortized intangible assets with an aggregate gross book value and accumulated amortization value of \$29,109 as these intangible assets were considered obsolete after the recent liquidation of a foreign subsidiary and the restructuring of the Company's Washington studio.

During the year ended December 31, 2016, the Company recorded an impairment of an intangible asset of \$4,597 related to the license fee paid to an affiliate of one of the Company's principal stockholders for the Company's Rival Fire game, which launched during the third quarter of 2016, due to underperformance of the title and the Company's determination that the title would generate negligible cash flows during the remaining contractual life of the license. No impairment of intangible assets was recorded during the year ended December 31, 2015.

During the years ended December 31, 2016, 2015 and 2014, the Company recorded amortization and impairment expense in the amounts of \$14,792, \$9,553 and \$4,767, respectively, in cost of revenue. During the years ended December 31, 2016, 2015 and 2014, the Company recorded amortization expense in the amounts of \$0, \$201 and \$508, respectively, in operating expenses. The Company recorded no impairment charges during the years ended December 31, 2015 and 2014.

As of December 31, 2016, the total expected future amortization related to intangible assets was as follows:

Year Ending December 31,	Amortization to Be Included in Cost of Revenue
2017	\$ 10,267
2018	5,905
2019	4,960
2020	3,258
2021 and thereafter	1,506

\$ 25,896

## Goodwill

In the valuation of the goodwill balance for Griptonite, Blammo, MIG, GameSpy, PlayFirst, Cie Games and Crowdstar, the Company gave consideration to the future economic benefits of other assets that were not individually identified or separately recognized. The acquired studio workforce for each of these acquisitions was estimated to have value, and since the acquired workforce is not individually identified or separately recognized, it was subsumed within the goodwill recognized as part of each business combination. The Company further planned to leverage its preexisting contractual relationships with Digital Storefronts to distribute new titles developed by the Griptonite, Blammo, PlayFirst, Cie Games and Crowdstar studios and the expected synergies are reflected in the value of the goodwill recognized. The Company also used the GameSpy acquired workforce and expertise to help in its development efforts for its games-as-a-service technology platform, and these synergies are reflected in the value of goodwill recognized.

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Goodwill for the periods indicated was as follows:

	December 31, 2016	December 31, 2015
Goodwill	\$ 161,001	\$ 161,075
Accumulated impairment losses	(73,111)	(73,111)
Balance as of January 1	87,890	87,964
Goodwill acquired during the year	29,029	—
Effects of foreign currency exchange	(87)	(74)
Balance as of period ended:	116,832	87,890
Goodwill	189,943	161,001
Accumulated impairment losses	(73,111)	(73,111)
Balance as of period ended	\$ 116,832	\$ 87,890

In accordance with ASC 350, the Company's goodwill is not amortized but is tested for impairment on an annual basis or whenever events or changes in circumstances indicate that the carrying amount of these assets may not be recoverable. Under ASC 350, the Company performs the annual impairment review of its goodwill balance as of September 30 or more frequently if triggering events occur.

The Company evaluates qualitative factors and overall financial performance to determine whether it is necessary to perform the first step of the multiple-step goodwill test. This step is referred to as "Step 0." Step 0 involves, among other qualitative factors, weighing the relative impact of factors that are specific to the reporting unit as well as industry and macroeconomic factors. After assessing those various factors, if it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the entity will need to proceed to the first step of the goodwill impairment test. ASC 350 requires a multiple-step approach to testing goodwill for impairment for each reporting unit annually, or whenever events or changes in circumstances indicate the fair value of a reporting unit is below its carrying amount. The first step measures for impairment by applying the fair value-based tests at the reporting unit level. The second step (if necessary) measures the amount of impairment by applying the fair value-based tests to individual assets and liabilities within each reporting unit. The fair value of the reporting units is estimated using a combination of the market approach, which utilizes comparable companies' data, and/or the income approach, which uses discounted cash flows.

The Company performed its annual impairment assessment as of September 30, 2016 and determined a Step 1 analysis was necessary due to a significant decline in its market capitalization and the significant impairment of prepaid royalties recorded during the three months ended September 30, 2016. Based on the results of the Step 1 analysis, the Company concluded that the fair value of the reporting unit was greater than the carrying value of the reporting unit based on a methodology that utilized both an income approach and a market approach. The Company considered valuation factors including its market capitalization, future discounted cash flows and an estimated control

premium based upon a review of comparable market transactions. Accordingly, the Company did not recognize an impairment of goodwill during the year ended December 31, 2016.

During the third quarter of fiscal 2015 and 2014, the Company performed a “Step 0” qualitative assessment for its reporting unit. Based on the assessment, the Company concluded that it was more likely than not that the fair value of the reporting unit was greater than its carrying amount, and as a result, did not proceed to further impairment testing. Accordingly, the Company did not recognize an impairment of goodwill during the years ended December 31, 2015 and December 31, 2014. As of December 31, 2016, there had been no triggering events or indicators of impairment that would require an updated impairment review.

Any material impairment of prepaid royalty and license fee assets in the future periods may require the Company to perform a goodwill impairment assessment. Such assessment could result in impairments to the Company’s goodwill, which could adversely impact the Company’s results of operations.

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## NOTE 8 — COMMITMENTS AND CONTINGENCIES

## Leases

The Company leases office space under non-cancelable operating facility leases with various expiration dates through April 2021. Rent expense for the years ended December 31, 2016, 2015 and 2014 was \$4,827, \$4,639 and \$4,149, respectively. The terms of the facility leases provide for rental payments on a graduated scale. The Company recognizes rent expense on a straight-line basis over the lease period, and has accrued for rent expense incurred but not paid. The deferred rent balance was \$820 and \$749 at December 31, 2016 and 2015, respectively, of which \$619 and \$692 was included within other long-term liabilities at December 31, 2016 and 2015, respectively.

In August and September of 2015, the Company entered into lease agreements for space at its San Mateo, California, and Portland, Oregon offices that will expire on November 30, 2020, and December 31, 2017, respectively. In March 2015, the Company entered into a lease amendment for its Long Beach, California office to expand the rentable square footage by 7,949 square feet, and amended the lease payment schedule.

The Company has provided deposits for lines of credit totaling \$1,052 to secure its obligations under the leases, which have been classified as restricted cash on the Company's consolidated balance sheet as of December 31, 2016.

At December 31, 2016, future minimum lease payments under non-cancelable operating leases were as follows:

Year Ending December 31,	Minimum Operating Lease Payments
2017	\$ 4,715
2018	3,031
2019	2,633
2020	1,741
2021 and thereafter	109
	\$ 12,229

## Minimum Guaranteed Royalties and Developer Commitments

The Company has entered into license and publishing agreements with various celebrities, Hollywood studios, athletes, sports organizations, and other well-known brands and properties to develop and publish games for mobile devices. Pursuant to some of these agreements, the Company is required to make minimum guaranteed royalty payments regardless of revenue generated by the applicable game, which may not be dependent on any deliverables. The significant majority of these minimum guaranteed royalty payments are recoupable against future royalty obligations that would otherwise become payable, or in certain circumstances, where not recoupable, are capitalized and amortized over the lesser of (1) the estimated life of the title incorporating licensed content or (2) the term of the license agreement.

At December 31, 2016, future unpaid minimum guaranteed royalty commitments were as follows:

Year Ending December 31,	Future Minimum Guarantee Commitments	Future Minimum Developer Commitments
2017	\$ 21,097	\$ 1,235
2018	1,236	—
2019	4,100	—
	\$ 26,433	\$ 1,235

The amounts represented in the table above reflect the Company's minimum cash obligations for the respective calendar years, but do not necessarily represent the periods in which they will be expensed in the Company's Consolidated Financial Statements.

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Future developer commitments as of December 31, 2016 were \$1,235. These developer commitments reflect the Company's minimum cash obligations to external software developers ("third-party developers") to design and develop its software applications but do not necessarily represent the periods in which they will be expensed. The Company advances funds to these third-party developers, in installments, payable upon the completion of specified development milestones, and expenses third-party developer commitments as services are provided.

Licensor commitments include \$22,611 of commitments to licensors that have been recorded in current and long-term liabilities and a corresponding amount in current and long-term assets because payment is not contingent upon performance by the licensor. The classification of commitments between long-term and short-term is determined based on the expected timing of recoupment of earned royalties calculated on projected revenue for the licensed IP games.

## Income Taxes

As of December 31, 2016, unrecognized tax benefits have been netted against deferred tax assets and potential interest and penalties are classified within "other long-term liabilities" on the Company's consolidated balance sheets. As of December 31, 2016, the settlement of the Company's income tax liabilities could not be determined; however, the liabilities are not expected to become due within the next 12 months.

## Indemnification Arrangements

The Company has entered into agreements under which it indemnifies each of its officers and directors during his or her lifetime for certain events or occurrences while the officer or director is or was serving at the Company's request in that capacity. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer insurance policy that limits its exposure and enables the Company to recover a portion of any future amounts paid. Accordingly, the Company had recorded no liabilities for these agreements as of December 31, 2016, 2015 and 2014.

In the ordinary course of its business, the Company includes standard indemnification provisions in most of its commercial agreements with Digital Storefronts and licensors. Pursuant to these provisions, the Company generally indemnifies these parties for losses suffered or incurred in connection with its games, including as a result of intellectual property infringement, viruses, worms and other malicious software, and legal or regulatory violations. The term of these indemnity provisions is generally perpetual after execution of the corresponding license agreement, and the maximum potential amount of future payments the Company could be required to make under these provisions is often unlimited. To date, the Company has not incurred costs to defend lawsuits or settle indemnified claims of these types. As a result, the Company believes the estimated fair value of these indemnity provisions is minimal. Accordingly, the Company had recorded no liabilities for these provisions as of December 31, 2016, 2015



and 2014.

#### Contingencies

From time to time, the Company is subject to various claims, complaints and legal actions in the normal course of business. The Company assesses its potential liability by analyzing specific litigation and regulatory matters using available information. The Company's estimate of losses is developed in consultation with inside and outside counsel, which involves a subjective analysis of potential results and outcomes, assuming various combinations of appropriate litigation and settlement strategies. After taking all of the above factors into account, the Company determines whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed reasonably probable and the amount can be reasonably estimated. The Company further determines whether an estimated loss from a contingency should be disclosed by assessing whether a material loss is deemed reasonably possible. Such disclosure will include an estimate of the additional loss or range of loss or will state that an estimate cannot be made.

On August 19, 2014, Inventor Holdings, LLC ("IHL"), a Delaware limited liability company, filed a complaint in the U.S. District Court for the District of Delaware alleging that the Company was infringing one of its patents and seeking unspecified damages, including interest, costs, expenses and an accounting of all infringing acts, attorneys' fees and such other costs as the Court deems just and proper. On October 10, 2014, the Company filed a motion to dismiss the

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complaint with prejudice on the ground that the patent asserted by IHL claims patent-ineligible subject matter pursuant to 35 U.S.C. § 101 and thus the complaint fails to state a claim upon which relief can be granted. On October 27, 2014, IHL filed an opposition to the Company's motion to dismiss the complaint with prejudice. The Company filed its reply to IHL's opposition on November 6, 2014. On September 30, 2015, the Court granted the Company's motion to dismiss IHL's complaint. On October 9, 2015, the parties entered a joint stipulation with the Court under which IHL agreed not to appeal the Court's order to dismiss the case and each party agreed to bear its own fees and costs of the litigation.

On November 5, 2014, the Company filed a complaint against Hothead Games, Inc. ("Hothead") in the United States District Court for the Northern District of California alleging that Hothead had willfully infringed certain of the Company's copyrights and trade dress contained in its Deer Hunter 2014 game through Hothead's release of its game, Kill Shot. On August 3, 2015, the Company entered into a settlement agreement with Hothead resolving its claims against Hothead. Hothead agreed to make payments to the Company, including ongoing payments and the Company agreed to allow Hothead to continue to publish the Kill Shot game. The Company filed a dismissal of the case on August 17, 2015, which the Court granted on August 18, 2015.

In November 2014, Telinit Technologies, LLC, a Texas company, filed a complaint in the U.S. District Court for the Eastern District of Texas, Marshall Division, alleging that the Company was infringing one of its patents and seeking unspecified damages, attorneys' fees and costs. The Company settled this dispute in January 2015 for an immaterial amount.

On November 4, 2015, Just Games Interactive LLC (d/b/a Kung Fu Factory, f/k/a Tiny Fun Studios) ("Just Games") filed a complaint in the U.S. District Court for the Central District of California against the Company, Kristen Jenner (f/k/a Kris Kardashian) and additional yet-to-be named defendants. The complaint alleged direct copyright infringement against the Company and direct and contributory copyright infringement and breach of implied contract against the other defendants. Just Games was seeking at least \$10,000 in damages as well as other relief, including costs, permanent and temporary injunctive relief, an accounting of profits, a constructive trust and such other costs the Court deemed just and proper. The Company filed a motion to dismiss the complaint on January 27, 2016. On February 1, 2016, Just Games filed a voluntary motion to dismiss their case against the Company without prejudice.

The Company does not believe it is party to any currently pending litigation, the outcome of which is reasonably likely to have a material adverse effect on its operations, financial position or liquidity. However, the ultimate outcome of any litigation is uncertain and, regardless of outcome, litigation can have an adverse impact on the Company because of defense costs, potential negative publicity, diversion of management resources and other factors.

NOTE 9 — STOCKHOLDERS' EQUITY

Common Stock

At December 31, 2016, the Company was authorized to issue 250,000 shares of common stock. As of December 31, 2016, the Company had reserved 33,347 shares for future issuance under its stock plans and outstanding warrants.

## Preferred Stock

At December 31, 2016, the Company was authorized to issue 5,000 shares of preferred stock.

## Tencent Investment

On April 29, 2015, the Company entered into a Purchase Agreement with Tencent Holdings Limited (“Tencent”) and Tencent’s controlled affiliate, Red River Investment Limited (“Red River”). Pursuant to the Purchase Agreement, the Company issued to Red River in a private placement an aggregate of 21,000 shares of the Company’s common stock (the “Shares”) at a purchase price of \$6.00 per share, for aggregate net proceeds of \$125,156, after offering expenses. The

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Company issued 12,500 of the Shares to Red River on April 29, 2015 and issued the remaining 8,500 Shares at a second closing on June 3, 2015.

### Acquisitions

On August 20, 2014, as part of the consideration for its acquisition of Cie Games, the Company issued an aggregate of 9,983 shares of its common stock to Cie Games' former shareholders, of which approximately 2,139 shares was held back by Glu for 18 months from the closing date of the acquisition to satisfy potential indemnification claims under the Cie Games merger agreement. All of these shares were released to former shareholders during the year ended December 31, 2016.

On May 14, 2014, as consideration for its acquisition of PlayFirst, the Company issued an aggregate of 2,849 shares of its common stock to PlayFirst's former shareholders, which is net of shares withheld to cover a net working capital adjustment, stockholders' agent expenses and tax obligations of certain former PlayFirst shareholders. Of the 2,849 shares issued in the acquisition, 1,500 shares that were held in escrow until the date that is 60 days following the 24 month anniversary of the closing date to satisfy potential indemnification claims under the PlayFirst merger agreement were released to former shareholders in July 2016. During the third quarter of 2014, approximately 24 shares that were being held back pursuant to the PlayFirst merger agreement were cancelled to satisfy a net working capital adjustment.

See Note 3 – Business Combinations – for more information about these acquisitions.

### Warrants to Purchase Common Stock

#### Celebrity Warrants

During 2015, the Company issued warrants to celebrity licensors, and entities affiliated with one of the celebrity licensors, to purchase up to an aggregate of 1,100 shares of the Company's common stock, subject to adjustments for dividends, reorganizations and other common stock events (collectively, the "Celebrity Warrants"). With respect to Celebrity Warrants covering 1,000 shares, such warrants vest with respect to 50% of the underlying shares upon public announcement of the related license agreement, with the remaining shares vesting in equal monthly installments over 24 months, subject to full acceleration in the event of (i) the Company's full recoupment of the minimum guarantee payments under the related license agreement, (ii) the termination of the license agreement due to the Company's material breach of the agreement or (iii) a change of control of the Company. With respect to the remaining Celebrity Warrants covering 100 shares issued in 2015, such warrants vest in equal monthly installments

over 60 months, with up to 25% of the shares subject to accelerated vesting in the event the celebrity licensor approves game design documentation by a certain date and the related game commercially launches by a certain date. During the years ended December 31, 2016, and 2015, none of these vesting conditions were met.

Each of the Celebrity Warrants may, at the election of the holder, be either exercised for cash or net exercised on a cashless basis. As of December 31, 2016, Celebrity Warrants covering 1,600 shares of the Company's common stock were outstanding.

The fair value of the outstanding Celebrity Warrants is estimated using the Black-Scholes valuation model. The Black-Scholes valuation model requires inputs such as the expected term of the Celebrity Warrants, expected volatility and risk-free interest rate. Certain of these inputs are subjective and require significant analysis and judgment to develop. The Company will estimate and record the fair value of these Celebrity Warrants using a Black-Scholes valuation model when the above vesting conditions have been met.

The amount recognized as expense with respect to these Celebrity Warrants was immaterial for each of years ended December 31, 2016, 2015 and 2014.

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## MGM Warrants

In July 2013, the Company and MGM Interactive Inc. (“MGM”) entered into a warrant agreement that provided MGM the right to purchase up to 3,333 shares of the Company’s common stock subject to adjustments for dividends, reorganizations and other common stock events (the “MGM Warrant”). As of December 31, 2016, MGM Warrants covering 2,667 shares of the Company’s common stock were outstanding. These remaining shares vest and become exercisable based on conditions related to the Company releasing mobile games based on mutually agreed upon intellectual property licensed by MGM to the Company. During the year ended December 31, 2016, none of these vesting conditions were met. During the year ended December 31, 2015, 1,000 shares underlying the MGM Warrants vested in conjunction with the commercial release of the Company’s game, James Bond: World of Espionage, which occurred on September 29, 2015. During the year ended December 31, 2015, the Company recorded \$1,928 of non-cash warrant related expense in cost of revenue as the James Bond: World of Espionage game was not expected to generate meaningful revenue over its lifetime.

The Company estimated the fair value of the warrants using the Black-Scholes valuation model and the weighted average assumptions noted in the following table:

	Year Ended December 31,					
	2016		2015		2014	
Dividend yield	—	%	—	%	—	%
Risk-free interest rate	1.76	%	1.18	%	1.90	%
Expected volatility	57.54	%	53.40	%	58.20	%
Expected term (in years)	4.78		5.00		5.00	

Warrants outstanding at December 31, 2016 were as follows:

	Number of Shares Outstanding Under Warrant	Weighted Average Exercise Price per Share	Average Contractual Term
Warrants outstanding, December 31, 2014	3,617	\$ 3.09	
Granted	1,100	4.44	
Exercised	(450)	1.50	
Warrants outstanding, December 31, 2015	4,267	\$ 3.61	5.50

Granted	-	-	
Exercised	-	-	
Warrants outstanding, December 31, 2016	4,267	\$ 3.61	4.78

During the years ended December 31, 2016, 2015, and 2014, warrant holders exercised warrants to purchase 0, 450, and 1,191 shares of the Company's common stock, respectively, and the Company received gross proceeds of \$0, \$675, and \$2,786, respectively, in connection with these exercises.

## NOTE 10 — STOCK OPTION AND OTHER BENEFIT PLANS

### 2007 Equity Incentive Plan

In 2007, the Company's Board of Directors adopted, and the Company's stockholders approved, the 2007 Equity Incentive Plan (the "2007 Plan"). The 2007 Plan permits the Company to grant stock options, RSUs, and other stock-based awards to employees, non-employee directors and consultants. The 2007 Plan was amended and restated in 2013 (the "Amended 2007 Plan") to, among other things, increase the aggregate number of shares of common stock authorized for issuance under the plan by 7,200 shares. In April 2015, the Company's Board of Directors approved, and in June 2015, the Company's stockholders approved, the Second Amended and Restated 2007 Equity Incentive Plan (the "Second Amended 2007 Plan"). The Second Amended 2007 Plan includes an increase of 13,000 shares in the aggregate number of shares of common stock authorized for issuance under the plan. It also includes a fungible share provision, pursuant to

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which each share that is subject to a stock-based award that is not a “full value award” (restricted stock, RSUs, or other stock-based awards where the price charged to the participant for the award is less than 100% of the fair market value) reduces the number of shares available for issuance by 1.32 shares (previously this fungible ratio was 1.39 shares under the Amended 2007 Plan).

The Company may grant options under the 2007 Plan at prices no less than 85% of the estimated fair value of the shares on the date of grant as determined by its Board of Directors, provided, however, that (i) the exercise price of an incentive stock option (“ISO”) or non-qualified stock options (“NSO”) may not be less than 100% or 85%, respectively, of the estimated fair value of the underlying shares of common stock on the grant date, and (ii) the exercise price of an ISO or NSO granted to a 10% stockholder may not be less than 110% of the estimated fair value of the shares on the grant date. The fair value of the Company’s common stock is determined by the last sale price of such stock on the NASDAQ Global Market on the date of determination. The stock options granted to employees generally vest with respect to 25% of the underlying shares one year from the vesting commencement date and with respect to an additional 1/48 of the underlying shares per month thereafter. Stock options granted during 2007 before October 25, 2007 and after June 4, 2015 have a contractual term of ten years and stock options granted on or after October 25, 2007 and before June 4, 2015 have a contractual term of six years.

As of December 31, 2016, 2,839 shares were available for future grants under the Second Amended 2007 Plan.

2007 Employee Stock Purchase Plan

In 2007, the Company’s Board of Directors adopted and the Company’s stockholders approved, the 2007 Employee Stock Purchase Plan (the “2007 Purchase Plan”). The Company initially reserved 667 shares of its common stock for issuance under the 2007 Purchase Plan. On each January 1 for the first eight calendar years after the first offering date, the aggregate number of shares of the Company’s common stock reserved for issuance under the 2007 Purchase Plan was increased automatically by the number of shares equal to 1% of the total number of outstanding shares of the Company’s common stock on the immediately preceding December 31, provided that the Board of Directors had the power to reduce the amount of the increase in any particular year and provided further that the aggregate number of shares issued over the term of this plan may not exceed 5,333. The 2007 Purchase Plan permits eligible employees, including employees of certain of the Company’s subsidiaries, to purchase common stock at a discount through payroll deductions during defined offering periods. The price at which the stock is purchased is equal to the lower of 85% of the fair market value of the common stock at the beginning of an offering period or after a purchase period ends.

In January 2009, the 2007 Purchase Plan was amended to provide that the Compensation Committee of the Company’s Board of Directors may fix a maximum number of shares that may be purchased in the aggregate by all participants during any single offering period (the “Maximum Offering Period Share Amount”). The Compensation Committee may raise or lower the Maximum Offering Period Share Amount. The Compensation Committee established the Maximum



Offering Period Share Amount of 500 shares for the offering period that commenced on February 15, 2009 and ended on August 14, 2009, and a Maximum Offering Period Share Amount of 200 shares for each offering period thereafter. In February 2016, the Committee increased the Maximum Offering Period Share Amount for the offering period that started on February 22, 2016 and for each subsequent offering period to 450 shares.

As of December 31, 2016, 1,179 shares were available for issuance under the 2007 Purchase Plan.

#### 2008 Equity Inducement Plan

In March 2008, the Company's Board of Directors adopted the 2008 Equity Inducement Plan (the "Inducement Plan") to augment the shares available under its existing 2007 Plan. The Company has not sought stockholder approval for the Inducement Plan. As such, awards under the Inducement Plan are granted in accordance with NASDAQ Listing Rule 5635(c)(4) and only to persons not previously an employee or director of the Company, or following a bona fide period of non-employment, as an inducement material to such individuals entering into employment with the Company. The Inducement Plan initially permitted the Company to grant only nonqualified stock options, but in 2013, the Compensation Committee of the Company's Board amended the Inducement Plan to permit the award of RSUs under the

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plan. The Company may grant NSOs under the Inducement Plan at prices less than 100% of the fair value of the shares on the date of grant, at the discretion of its Board of Directors. The fair value of the Company's common stock is determined by the last sale price of such stock on the NASDAQ Global Market on the date of determination. In November 2016, the Company's Compensation Committee approved an increase of 6,000 shares in the aggregate number of shares of common stock authorized under the plan.

As of December 31, 2016, 1,026 shares were reserved for future grants under the Inducement Plan.

## Share-Based Awards Available for Grant

	Shares Available
Balances at December 31, 2015	9,684
Increase in authorized shares	6,000
Share-based awards granted (1)	(16,720)
Share-based awards canceled (2)	4,900
Balances at December 31, 2016	3,864

- (1) Under the terms of the Amended 2007 Plan, RSUs granted on or after June 6, 2013 but before June 4, 2015 reduced the number of shares available for grant by 1.39 shares for each share subject to an RSU award. Under the terms of the Second Amended 2007 Plan, RSUs granted on or after June 4, 2015 reduce the number of shares available for grant by 1.32 shares for each share subject to an RSU award.
- (2) Under the terms of the Amended 2007 Plan, RSUs forfeited and returned to the pool of shares available for grant that were granted on or after June 6, 2013 but before June 4, 2015 increase the pool by 1.39 shares for each share subject to an RSU that is forfeited. RSUs forfeited and returned to the pool of shares available for grant that were granted on or after June 4, 2015 increase the pool by 1.32 shares for each share subject to an RSU that is forfeited.

## RSU Activity

A summary of the Company's RSU activity for the year ended December 31, 2016 is as follows:

Weighted

	Number of Units Outstanding	Average Grant Date Fair Value	Aggregate Intrinsic Value
Awarded and unvested, December 31, 2015	7,344	\$ 4.40	
Granted	5,094	\$ 2.52	
Vested	(2,422)	\$ 4.51	
Forfeited	(1,792)	\$ 3.86	
Awarded and unvested, December 31, 2016	8,224	\$ 3.33	
Restricted stock units vested and expected to vest at December 31, 2016	7,013	\$ 3.36	\$ 13,605

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## Stock Option Activity

The following table summarizes the Company's stock option activity:

	Options Outstanding Weighted Number of Shares	Weighted Average Exercise Price	Average Contractual Term (Years)	Aggregate Intrinsic Value
Balances at December 31, 2013	10,399	2.98		
Options granted	1,344	4.08		
Options canceled	(1,506)	3.72		
Options exercised	(2,867)	2.19		
Balances at December 31, 2014	7,370	3.32		
Options granted	1,659	4.65		
Options canceled	(425)	4.00		
Options exercised	(1,440)	2.64		
Balances at December 31, 2015	7,164	\$ 3.73	4.05	\$ 389
Options granted	10,347	\$ 2.16		
Options canceled	(1,273)	\$ 4.04		
Options exercised	(425)	\$ 1.55		
Balances at December 31, 2016	15,813	\$ 2.74	7.38	\$ —

Options vested and expected to vest at  
December 31, 2016

13,868	\$ 2.81	7.06	\$ —
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Options exercisable at December 31, 2016

4,889	\$ 3.72	2.77	\$ —
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At December 31, 2016, the options outstanding and currently exercisable by exercise price were as follows:

Options Outstanding			Options Exercisable		
Range of Exercise	Number	Weighted Average Remaining Contractual Life	Weighted Average Exercise	Number	Weighted Average Exercise

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Prices	Outstanding	(in Years)	Price	Exercisable	Price
			\$		\$
\$ 2.10 - \$ 2.10	5,707	9.87	\$ 2.10	-	\$ 0.00
			\$		\$
\$ 2.13 - \$ 2.13	3,450	9.78	2.13	-	0.00
			\$		\$
\$ 2.14 - \$ 2.90	1,951	3.27	2.63	1,474	2.74
			\$		\$
\$ 2.91 - \$ 3.29	2,089	4.21	3.09	1,452	3.14
			\$		\$
\$ 3.56 - \$ 4.30	1,582	4.66	4.00	1,002	3.95
			\$		\$
\$ 4.35 - \$ 6.67	966	4.18	5.40	893	5.43
			\$		\$
\$ 9.64 - \$9.64	1	0.77	9.64	1	9.64
			\$		\$
\$ 11.50 - \$ 11.50	65	0.22	11.50	65	11.50
			\$		\$
\$ 11.66 - \$ 11.66	1	0.57	11.66	1	11.66
			\$		\$
\$ 11.88- \$ 11.88	1	0.30	11.88	1	11.88
			\$		\$
\$ 2.10 - \$ 11.88	15,813	7.38	\$ 2.74	4,889	\$ 3.72

The Company has computed the aggregate intrinsic value amounts disclosed in the above table based on the difference between the original exercise price of the options and the fair value of the Company's common stock of \$1.94 per share at December 31, 2016. The total intrinsic value of awards exercised during the years ended December 31, 2016, 2015 and 2014 was \$444, \$4,960, and \$7,735, respectively.

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## Stock-Based Compensation

The Company recognizes stock-based compensation expense in accordance with ASC 718, and has estimated the fair value of each option award on the grant date using the Black-Scholes option valuation model and the weighted average assumptions noted in the following table.

	Year Ended December 31,					
	2016	2015	2014			
Dividend yield	—	%	—	%	—	%
Risk-free interest rate	1.39	%	1.34	%	1.34	%
Expected volatility	52.3	%	51.8	%	52.0	%
Expected term (years)	4.00		4.00		4.00	

The Company based its expected volatility on its own historical volatility and the historical volatility of a peer group of publicly traded entities. The expected term of options gave consideration to early exercises, post-vesting cancellations and the options' contractual term ranging from 6 to 10 years. The risk-free interest rate for the expected term of the option is based on the U.S. Treasury Constant Maturity Rate as of the date of grant. The weighted-average fair value of stock options granted during the year ended December 31, 2016, 2015 and 2014 was \$0.90, \$1.88, and \$1.69 per share, respectively.

The cost of RSUs is determined using the fair value of the Company's common stock based on the quoted closing price of the Company's common stock on the date of grant. RSUs typically vest and are settled over approximately a four-year period with 25% of the shares vesting on or around the one-year anniversary of the grant date and the remaining shares vesting quarterly thereafter. Compensation cost is amortized on a straight-line basis over the requisite service period.

The Company calculated employee stock-based compensation expense based on awards ultimately expected to vest and reduced it for estimated forfeitures. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

During 2014, the Company granted to its Chief Executive Officer two RSU awards for a total of 575 shares of the Company's common stock with both time-based and stock-price-based vesting components (the "Market-Based RSUs"). The Company estimated the fair values and derived service periods of the Market-Based RSUs on the date of grant

using a Monte Carlo valuation model. The total fair value of both Market-Based RSUs was initially estimated at \$1,311 and was to be recognized in tranches over the longer of the derived service period or time-based vesting period on a graded vesting basis. Key assumptions for the year ended December 31, 2014 included an expected volatility of 48.5%, risk-free rate of 1.35%, dividend yield of 0.00%, and grant price of \$4.05 based on closing price of the Company's common stock on The NASDAQ Global Market on April 24, 2014. On July 24, 2014, the Compensation Committee of the Company's Board of Directors approved a modification to the Market-Based RSUs to remove stock-price-based vesting conditions. Accordingly, the Market-Based RSUs will only be subject to time-based vesting from July 24, 2014 onwards. As a result of the modification to the market-based vesting condition, the original unamortized stock-based compensation expense and an incremental unamortized expense of \$2,714 will be recognized over the remaining service period.

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The following table summarizes the consolidated stock-based compensation expense by line items in the consolidated statement of operations:

	Year Ended December 31,		
	2016	2015	2014
Research and development	\$ 4,567	\$ 3,563	\$ 7,422
Sales and marketing	1,091	1,082	701
General and administrative	7,605	7,041	3,510
Total stock-based compensation expense	\$ 13,263	\$ 11,686	\$ 11,633

The above table includes compensation expense attributable to the contingent consideration issued to the Blammo employees who were former shareholders of Blammo, which was recorded as research and development expense over the term of the earn-out periods, since these employees were primarily employed in product development. The Company re-measured the fair value of the contingent consideration each reporting period and only recorded a compensation expense for the portion of the earn-out target that was likely to be achieved. Since the contingency related to the number of shares to be earned in conjunction with all earn out years was resolved as of December 31, 2014, the full fair value of the shares has been presented in additional paid in capital. During the years ended December 31, 2016, 2015, and 2014 the Company recorded \$0, \$0, and \$4,560 of stock-based compensation expense, respectively, related to this contingent consideration.

Consolidated net cash proceeds from option exercises were \$294, \$3,794 and \$6,271 for the year ended December 31, 2016, 2015 and 2014, respectively. The Company realized no significant income tax benefit from stock option exercises during the year ended December 31, 2016, 2015 and 2014. As required, the Company presents excess tax benefits from the exercise of stock options, if any, as financing cash flows rather than operating cash flows. As permitted by ASC 718, the Company has deferred the recognition of its excess tax benefit from non-qualified stock option exercises.

As of December 31, 2016, the Company had \$25,248 of total unrecognized compensation expense related to RSUs, net of estimated forfeitures. As of December 31, 2016, the Company had \$8,435 of total unrecognized compensation expense related to stock options, net of estimated forfeitures. The unrecognized compensation expense related to RSUs will be recognized over a weighted average period of 2.91 years. The unrecognized compensation expense related to stock options will be recognized over a weighted average period of 3.60 years.

## 401(k) Defined Contribution Plan



The Company sponsors a 401(k) defined contribution plan covering all employees. The Company does not match the contributions made by its employees.

# NOTE 11 — INCOME TAXES

The components of income/(loss) before income taxes by tax jurisdiction were as follows:

	Year Ended December 31,		
	2016	2015	2014
United States	\$ (87,085)	\$ (7,819)	\$ 5,283
Foreign	(656)	775	(4,690)
Income/(loss) before income taxes	\$ (87,741)	\$ (7,044)	\$ 593

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The components of income tax benefit/(expense) were as follows:

	Year Ended December 31,		
Current:	2016	2015	2014
Federal	\$ 127	\$ (24)	\$ (5)
State	(6)	(5)	(5)
Foreign	(86)	(183)	656
	35	(212)	646
Deferred:			
Federal	328	—	6,821
Foreign	(62)	71	88
	266	71	6,909
Total:			
Federal	455	(24)	6,816
State	(6)	(5)	(5)
Foreign	(148)	(112)	744
	\$ 301	\$ (141)	\$ 7,555

The difference between the actual rate and the federal statutory rate was as follows:

	Year Ended December 31,			
	2016	2015	2014	
Tax at federal statutory rate	34.0 %	34.0 %	34.0 %	%
State tax, net of federal benefit	—	(0.1)	0.8	
Foreign rate differential	(0.1)	1.0	56.6	
Research and development credit	0.9	15.9	(133.9)	
Warrants	—	—	67.7	
Withholding taxes	0.2	0.3	(10.5)	
Stock-based compensation	(2.9)	(8.7)	224.9	
Non-deductible intercompany bad debt	—	—	3.9	
FIN 48 interest and release	(0.1)	1.8	(219.4)	
Other	(0.1)	(0.2)	59.6	
Deemed dividend from foreign liquidation	(1.4)	—	—	
Valuation allowance	(30.2)	(46.1)	(1,357.7)	

Effective tax rate	0.3	%	(2.1)	%	(1,274.0)%
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During 2016, the Company recorded a net release of its valuation allowance of \$328 as a result of the acquisition of Crowdstar Inc. in November 2016.

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Deferred tax assets and liabilities consist of the following:

	December 31, 2016			December 31, 2015		
	US	Foreign	Total	US	Foreign	Total
Deferred tax assets:						
Fixed assets	\$ 191	\$ 40	\$ 231	\$ —	\$ 1,156	\$ 1,156
Net operating loss carryforwards	55,850	526	56,376	37,907	9,493	47,400
Accruals, reserves and other	12,006	97	12,103	4,811	129	4,940
Foreign tax credit	6,460	—	6,460	6,615	—	6,615
Stock-based compensation	3,830	—	3,830	4,866	—	4,866
Research and development credit	11,190	—	11,190	9,292	—	9,292
Other	2,011	—	2,011	121	17	138
Total deferred tax assets	\$ 91,538	\$ 663	\$ 92,201	\$ 63,612	\$ 10,795	\$ 74,407
Deferred tax liabilities:						
Fixed assets	\$ —	\$ (1)	\$ (1)	\$ (290)	\$ —	\$ (290)
Intangible assets	(4,441)	(6)	(4,447)	(4,471)	(54)	(4,525)
Other	—	—	—	—	(16)	(16)
Net deferred tax assets	87,097	656	87,753	58,851	10,725	69,576
Less valuation allowance	(87,097)	(464)	(87,561)	(58,851)	(10,470)	(69,321)
Net deferred tax assets	\$ —	\$ 192	\$ 192	\$ —	\$ 255	\$ 255

In November 2015, the FASB issued ASU 2015-17, “Balance Sheet Classification of Deferred Taxes.” This update requires an entity to classify deferred tax liabilities and assets as noncurrent within a classified statement of financial position. ASU 2015-17 is effective for annual reporting periods, and interim periods therein, beginning after December 15, 2016. This update may be applied either prospectively to all deferred tax liabilities and assets or retrospectively to all periods presented. Early application is permitted as of the beginning of the interim or annual reporting period. The Company adopted ASU 2015-17 on a prospective basis as of December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on the Company’s consolidated financial statements.

The Company has not provided deferred taxes on unremitted earnings attributable to foreign subsidiaries, excluding China, because their earnings are intended to be reinvested indefinitely. No deferred tax asset was recognized since the Company does not believe the deferred tax asset will be realized in the foreseeable future. The amount of accumulated foreign earnings of the Company’s foreign subsidiaries totaled \$913 as of December 31, 2016. If the Company’s foreign earnings were repatriated, additional tax expense might result. The Company determined that the calculation of the amount of unrecognized deferred tax liability related to these cumulative unremitted earnings attributable to foreign subsidiaries is not practicable.

The Company recorded a release of its valuation allowance of \$328, \$0, and \$6,821 during 2016, 2015, and 2014, respectively. The 2016 and 2014 releases were associated with the acquisitions of Crowdstar Inc. in November 2016 and Cie Games in August 2014, respectively. Pursuant to ASC 805-740, changes in the Company's valuation allowance that stem from a business combination should be recognized as an element of the Company's deferred income tax expense or benefit. The Company previously recognized a valuation allowance against its net operating loss carryforwards and determined that it should be able to utilize the benefit of those net operating losses against the deferred tax liabilities of Crowdstar Inc. and Cie Games, respectively; therefore, it has partially released its pre-existing valuation allowance.

In accordance with ASC 740 and based on all available evidence on a jurisdictional basis, the Company believes that it is more likely than not that its deferred tax assets will not be utilized and has recorded a full valuation allowance against its net deferred tax assets in each of its jurisdictions except for one entity in China. The Company assesses on a periodic basis the likelihood that it will be able to recover its deferred tax assets. The Company considers all available evidence, both positive and negative, including historical levels of income or losses, expectations and risks associated with estimates of future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for the valuation allowance. If it is not more likely than not that the Company expects to recover its deferred tax assets, the Company will increase its provision for taxes by recording a valuation allowance against the deferred tax assets that it

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estimates will not ultimately be recoverable. The available negative evidence at December 31, 2016 and 2015 included historical and projected future operating losses. As a result, the Company concluded that an additional valuation allowance of \$18,240 and \$795, net of the described releases, was required to reflect the change in its deferred tax assets prior to valuation allowance during 2016 and 2015, respectively. As of December 31, 2016 and 2015, the Company considered it more likely than not that its deferred tax assets would not be realized within their respective carryforward periods.

At December 31, 2016, the Company had net operating loss carryforwards of approximately \$158,531 and \$97,627 for federal and state tax purposes, respectively. These carryforwards will expire at various times between 2017 and 2036. In addition, the Company has research and development tax credit carryforwards of approximately \$11,158 for federal income tax purposes and \$12,941 for California tax purposes. The federal research and development tax credit carryforwards will begin to expire in 2023. The California state research credit will carry forward indefinitely. The Company has approximately \$6,320 of foreign tax credits that will begin to expire in 2017. The Company's ability to use its net operating loss carryforwards and federal and state tax credit carryforwards to offset future taxable income and future taxes, respectively, may be subject to restrictions attributable to equity transactions that result in changes in ownership as defined by Internal Revenue Code Section 382.

A reconciliation of the total amounts of unrecognized tax benefits was as follows:

	Year Ended December 31,	
	2016	2015
Beginning balance	\$ 9,218	\$ 6,794
Reductions of tax positions taken during previous years	(806)	(304)
Additions based on uncertain tax positions related to the current period	2,590	2,085
Additions based on uncertain tax positions related to prior periods	43	675
Cumulative translation adjustment	(34)	(32)
Ending balance	\$ 11,011	\$ 9,218

The total unrecognized tax benefits as of December 31, 2016 and 2015 included approximately \$10,590 and \$8,678, respectively, of unrecognized tax benefits that have been netted against deferred tax assets. As of December 31, 2016, approximately \$421 of unrecognized tax benefits, if recognized, would impact the Company's effective tax rate. The remaining amount, if recognized, would adjust the Company's deferred tax assets which are subject to valuation allowance. At December 31, 2016, the Company anticipated that the liability for uncertain tax positions, excluding interest and penalties, could decrease by approximately \$126 within the next twelve months due to the expiration of certain statutes of limitation in foreign jurisdictions in which the Company does business.

The Company's policy is to recognize interest and penalties related to unrecognized tax benefits in income tax expense. The Company has accrued \$294 of interest and penalties on uncertain tax positions as of December 31, 2016, as compared to \$375 as of December 31, 2015. Approximately \$128, \$78 and \$86 of accrued interest and penalty expense related to estimated obligations for unrecognized tax benefits was recognized during 2016, 2015 and 2014, respectively. During 2016, the Company released \$184 of interest and penalties on uncertain tax positions due to the expiration of certain statutes of limitation in foreign jurisdictions in which the Company does business.

The Company is subject to taxation in the United States and various foreign jurisdictions. The material jurisdictions subject to examination by tax authorities are primarily the State of California, the United States, Canada and China. The Company's federal tax returns are open by statute for tax years 1997 and California tax returns are open by statute for tax years 2003 and forward and could be subject to examination by the tax authorities. The Company's China income tax returns are open by statute for tax years 2011 and forward.

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## NOTE 12 — SEGMENT REPORTING

ASC 280, Segment Reporting (“ASC 280”), establishes standards for reporting information about operating segments. It defines operating segments as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision-maker, or decision-making group, in deciding how to allocate resources and in assessing performance. The Company’s Chief Executive Officer, who is also chief operating decision maker, makes decisions and manages the Company’s operations as one operating segment. The financial information reviewed by him is included within one operating segment for purposes of allocating resources and evaluating financial performance.

Accordingly, the Company reports as a single reportable segment—mobile games. In the case of Digital Storefronts, revenue are attributed to the geographic location where the end-user makes the purchase. The Company generates its revenue in the following geographic regions:

	Year Ended December 31,		
	2016	2015	2014
United States of America	\$ 149,031	\$ 171,759	\$ 132,447
Americas, excluding the USA	9,127	11,538	9,705
EMEA	24,303	36,134	43,507
APAC	18,120	30,469	37,487
	\$ 200,581	\$ 249,900	\$ 223,146

The Company attributes its long-lived assets, which primarily consist of property and equipment, to a country primarily based on the physical location of the assets. Property and equipment, net of accumulated depreciation and amortization, summarized by geographic location was as follows:

	December 31,	
	2016	2015
Americas	\$ 5,423	\$ 4,938
EMEA	166	408
APAC	51	101
	\$ 5,640	\$ 5,447



NOTE 13 — RESTRUCTURING

During each of 2014, 2015 and 2016, the Company's management approved restructuring plans to improve the effectiveness and efficiency of its operating model and reduce operating expenses around the world. During the year ended December 31, 2014, the Company recorded \$435 of restructuring charges, relating to employee termination costs associated with headcount reductions in its Moscow, Russia; Bellevue, Washington; and San Francisco, California studios. During the year ended December 31, 2015, the Company recorded \$1,075 of restructuring charges relating to employee termination costs in the Company's Beijing, China and Bellevue, Washington offices. During the year ended December 31, 2016, the Company recorded \$2,279 of restructuring charges related to employee termination costs in the Company's Long Beach, California; San Francisco, California; Bellevue, Washington; and Beijing, China offices, and lease termination costs for the Company's Bellevue, Washington and Beijing, China offices.

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	Fiscal 2014, 2015, and 2016			
	Restructuring Workforce	Restructuring Facility	Restructuring Other	Restructuring Total
Balance as of Jan 1, 2014	\$ —	\$ —	\$ —	\$ —
Charges to operations	435	—	—	435
Non-cash charges/adjustments	—	—	—	—
Charges settled in cash	(435)	—	—	(435)
Balance as of December 31, 2014	\$ —	\$ —	\$ —	\$ —
Charges to operations	1,044	—	31	1,075
Non-cash charges/adjustments	—	—	—	—
Charges settled in cash	(734)	—	—	(734)
Balance as of December 31, 2015	\$ 310	\$ —	\$ 31	\$ 341
Charges to operations	1,491	740	48	2,279
Non-cash charges/adjustments	—	122	—	122
Charges settled in cash	(1,801)	(591)	(79)	(2,471)
Balance as of December 31, 2016	\$ —	\$ 271	\$ —	\$ 271

## NOTE 14 – QUARTERLY FINANCIAL DATA (unaudited, in thousands)

The following table sets forth unaudited quarterly consolidated statements of operations data for 2015 and 2016. The Company derived this information from its unaudited consolidated financial statements, which it prepared on the same basis as its audited consolidated financial statements contained in this report. In its opinion, these unaudited statements include all adjustments, consisting only of normal recurring adjustments that the Company considers necessary for a fair statement of that information when read in conjunction with the consolidated financial statements and related notes included elsewhere in this report. The operating results for any quarter should not be considered indicative of results for any future period.

For the Three Months Ended

2016

March 31, June 30,

(In thousands)

2015

September 30, December 31, March 31, June 30, September 30, December 31,

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Revenue	\$ 54,528	\$ 48,363	\$ 51,381	\$ 46,309	\$ 69,470	\$ 56,150	\$ 63,250	\$ 61,030
Cost of revenue:								
Platform commissions, royalties and other	20,320	18,534	18,918	17,467	26,310	21,231	25,890	22,251
Impairment of prepaid royalties and minimum guarantees	43	105	29,836 (d)	123	—	89	1,555	858
Impairment and amortization of intangible assets	2,324	2,336	7,320	2,812	2,434	2,434	2,360	2,325
Total cost of revenue	22,687	20,975	56,074	20,402	28,744	23,754	29,805	25,434
Gross profit	31,841	27,388	(4,693)	25,907	40,726	32,396	33,445	35,596
Operating expenses:								
Research and development	20,312	20,721	20,080	20,766	18,243	18,308	16,304	20,001
Sales and marketing	12,624	10,935	10,104	14,387	12,438	12,771	12,302	10,729
General and administrative	7,984	7,096	7,011	8,134	7,406	7,429	4,419	6,838
Amortization of intangible assets	—	—	—	—	127	32	31	11
Restructuring charge	106 (a)	2,116 (b)	57 (c)	—	—	—	—	1,075
Total operating expenses	41,026	40,868	37,252	43,287	38,214	38,540	33,056	38,654
Income/(loss) from operations	(9,185)	(13,480)	(41,945)	(17,380)	2,512	(6,144)	389	(3,058)
Interest and other income/(expense), net	469	(4,453)	(1,653)	(114)	(284)	(174)	(152)	(134)
Income/(loss) before income taxes	(8,716)	(17,933)	(43,598)	(17,494)	2,228	(6,318)	237	(3,192)
Income tax benefit/(provision)	166	(16)	(129)	280	(1,104)	809	(79)	234
Net income /(loss)	\$ (8,550)	\$ (17,949)	\$ (43,727)	\$ (17,214)	\$ 1,124	\$ (5,509)	\$ 158	\$ (2,958)
Net income/(loss) per share								
Basic	\$ (0.07)	\$ (0.14)	\$ (0.33)	\$ (0.13)	\$ 0.01	\$ (0.05)	\$ 0.00	\$ (0.02)
Diluted	\$ (0.07)	\$ (0.14)	\$ (0.33)	\$ (0.13)	\$ 0.01	\$ (0.05)	\$ 0.00	\$ (0.02)

(a) Includes \$106 of restructuring charges relating to employee termination costs in the Company's Long Beach office.

(b) Includes \$1,421 of restructuring charges relating to employee termination costs in the Company's San Francisco,



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APAC, and Washington offices, and \$695 of restructuring charges relating to facility costs in the Company's Washington and China Korea offices

- (c) Includes \$11 of restructuring charges relating to employee termination costs in the Company's China and Korea offices, and \$48 of restructuring charges relating to facility costs in the Company's Washington, China, and Korea offices.
- (d) These charges are related to impairment of prepaid guaranteed royalties and license fees paid to an affiliate of one of the Company's principal stockholders in connection with the Company's game, Rival Fire, guaranteed royalty payments for certain of its celebrity license agreements, and certain other prepaid royalties.

NOTE 15 – RELATED PARTY TRANSACTIONS

The Company and an affiliate of one of the Company's principal stockholders entered into an agreement in November 2015 pursuant to which the Company agreed, subject to certain conditions, to pay in the aggregate, up to \$15,000 in recoupable advanced royalties and non-recoupable license fees. As of December 31, 2016, the Company had paid the full amount of \$15,000, as all payment milestones were achieved.

During the year ended December 31, 2016, the Company recorded an impairment of \$14,463 for un-recouped advanced royalties and non-recoupable license fees that were paid to an affiliate of one of the Company's principal stockholders, due to the underperformance of the Company's Rival Fire title which launched during the third quarter of 2016 and the negligible cash flows anticipated for the remaining contractual life of these assets.

NOTE 16 – SUBSEQUENT EVENTS

In January 2017, the Company committed to a restructuring plan, consisting of the following:

- the elimination of approximately 109 positions, approximately 97 of which were from its Bellevue, Washington and Long Beach, California studios, and approximately 12 of which were from its San Francisco headquarters;
- the discontinuation of all operations at its Bellevue, Washington studio; and
- the potential elimination of approximately an additional 30 positions (for a potential reduction in force of up to approximately 139 positions) and discontinuation of all remaining operations at its Long Beach, California studio, contingent on the results of the planned beta release of its Car Town Racing title in late Q1-2017 (the "Contingent Portion").

In connection with these actions, the Company expects to incur charges of approximately \$2,600 to \$2,800 if the Contingent Portion of the plan is not triggered, and estimates approximately \$2,000 to \$2,100 of such charges will be related to employee severance and benefits, and approximately \$600 to \$700 will be related to lease, contract termination and other costs. The Company expects to incur charges of approximately \$4,300 to \$4,700 if the

Contingent Portion of the plan is triggered, and estimates approximately \$2,450 to 2,650 of such charges will be related to employee severance and benefits, and approximately \$1,850 to \$2,050 will be related to lease, contract termination and other costs. If the Contingent Portion of the plan is not triggered, the Company expects to recognize substantially all of the restructuring-related costs during the first quarter of 2017. If the Contingent Portion of the plan is triggered, the Company expects to recognize the restructuring-related costs attributable to the Contingent Portion in the second quarter of 2017. The Company expects substantially all of the severance and benefit charges, and a majority of the lease, contract termination and other costs, to entail cash expenditures.

As part of this restructuring plan, the Company also began transitioning game development and live operations for its Racing Rivals title from its Long Beach, California studio to Carbonated Inc. (“Carbonated”) in January 2017. It agreed to provide Carbonated with development funding and a percentage of the profits generated by the Racing Rivals title to the extent that Carbonated is able to increase the net revenue from this title. The development funding is

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fully recoupable by the Company, along with user acquisition, hosting and certain other game-related costs, before any profit sharing payments are made to Carbonated.

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

None.

Item 9A. Controls and Procedures

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 pursuant to Rule 13a-15 under the Exchange Act. 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 its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2016, our disclosure controls and procedures are designed to provide reasonable assurance and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2016 based on the guidelines established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on the results of this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2016 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles.

The scope of management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2016 excluded Crowdstar Inc. because it was acquired by Glu through purchase business combination in 2016. Crowdstar Inc. is a wholly-owned subsidiary whose total assets and total revenue represented 4.1% and 1.0%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2016.

The effectiveness of our internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report appearing on page 77.

#### Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the three months ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.



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Item 9B. OTHER INFORMATION

None

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required for this Item is incorporated by reference from our Proxy Statement to be filed for our 2017 Annual Meeting of Stockholders. For information with respect to our executive officers, see “Executive Officers” at the end of Part I, Item 1 of this report.

We maintain a Code of Business Conduct and Ethics that applies to all employees, officers and directors. Our Code of Business Conduct and Ethics is published on our website at [www.glu.com/investors](http://www.glu.com/investors). We disclose on our website amendments to certain provisions of our Code of Business Conduct and Ethics, or waivers of such provisions granted to executive officers and directors.

Item 11. Executive Compensation

The information required for this Item is incorporated by reference from our Proxy Statement to be filed for our 2017 Annual Meeting of Stockholders.

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

The information set forth in the section titled “Security Ownership of Certain Beneficial Owners and Management” contained in our Proxy Statement to be filed for our 2017 Annual Meeting of Stockholders is incorporated herein by reference.

Equity Compensation Plan Information

The following table sets forth certain information, as of December 31, 2016, concerning securities authorized for issuance under all of our equity compensation plans: our 2001 Second Amended and Restated Stock Option Plan (the “2001 Plan”), which terminated when we adopted the 2007 Equity Incentive Plan (the “2007 Plan”), 2007 Employee Stock Purchase Plan (the “ESPP”) and 2008 Equity Inducement Plan (the “Inducement Plan”). The ESPP contains an “evergreen” provision, pursuant to which on January 1st of each year we automatically added 1% of our shares of common stock

outstanding on the preceding December 31st to the shares reserved for issuance under the ESPP; this evergreen provision expired after the increase on January 1, 2015. In addition, pursuant to a “pour over” provision in our 2007 Plan, options that are cancelled, expired or terminated under the 2001 Plan are added to the number of shares reserved for issuance under our 2007 Plan.

	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under (Excluding Securities Reflected in Column (a)) (c)	
Equity compensation plans approved by security holders	\$ 17,110,570	3.02	4,018,143	(2)
Equity compensation plans not approved by security holders	6,926,573	(3) 2.20	1,025,666	(4)
Total	24,037,143	\$ 5.22	5,043,809	

(1) The weighted average exercise price does not take into account the shares subject to outstanding restricted stock units, which have no exercise price.

(2) Represents 2,839,105 shares available for issuance under our the 2007 Plan, which plan permits the grant of incentive and non-qualified stock options, stock appreciation rights, restricted stock, stock awards and restricted stock units; and 1,179,038 shares available for issuance under the ESPP.

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- (3) Represents outstanding options under the Inducement Plan.
- (4) Represents shares available for issuance under the Inducement Plan, under which we may only grant non-qualified stock options and restricted stock units.

Our Board of Directors adopted the Inducement Plan in March 2008 to augment the shares available under our 2007 Plan. We have not sought stockholder approval for the Inducement Plan. As such, awards under the Inducement Plan are granted in accordance with NASDAQ Listing Rule 5635(c)(4) and only to persons not previously an employee or director, or following a bona fide period of non-employment, as an inducement material to such individuals entering into employment with us. As of December 31, 2016, we had reserved a total of 9,969,245 shares of our common stock for grant and issuance under the Inducement Plan since its inception, of which, 6,926,573 shares were subject to outstanding stock options and restricted stock units and 1,025,666 shares remained available for issuance. The remaining 2,017,006 shares represent shares that were subject to previously granted stock options or restricted stock units under the Inducement Plan that have been exercised by the option holders or settled for shares of our common stock.

The Inducement Plan initially permitted us to grant only non-qualified stock options. However, effective November 2013, the Compensation Committee amended the Inducement Plan to permit the award of restricted stock units under the plan. We may grant non-qualified stock options under the Inducement Plan at prices less than 100% of the fair value of the shares on the date of grant, at the discretion of our Board of Directors. The fair value of our common stock is determined by the last sale price of our stock on The NASDAQ Global Market on the date of determination. If any option or RSU granted under the Inducement Plan expires or terminates for any reason without being exercised in full, are used to satisfy tax withholding obligations with respect to the award, or otherwise terminate without the underlying shares being issued, such unexercised, tax-settled, or otherwise terminated shares will be available for grant under the Inducement Plan. All outstanding awards are subject to adjustment for any future stock dividends, splits, combinations, or other changes in capitalization as described in the Inducement Plan. If we were acquired and the acquiring corporation did not assume or replace the awards granted under the Inducement Plan, or if we were to liquidate or dissolve, all outstanding awards will expire on such terms as our Board of Directors determines.

For more information regarding the Inducement Plan, see Note 9 of Notes to Consolidated Financial Statements in Item 8 of this report.

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

The information required for this Item is incorporated by reference from our Proxy Statement to be filed for our 2017 Annual Meeting of Stockholders.

Item 14. Principal Accounting Fees and Services.

The information required for this Item is incorporated by reference from our Proxy Statement to be filed for our 2017 Annual Meeting of Stockholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Financial Statements: The financial statements filed as part of this report are listed on the index to financial statements on page 71.

(2) Financial Schedules: All schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is otherwise included.

(b) Exhibits. The exhibits listed on the Exhibit Index (following the Signatures section of this report) are included, or incorporated by reference, in this report.

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Item 16. Form 10-K Summary

None.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GLU MOBILE INC.

Date: March 10, 2017 By: /s/ Nick Earl  
Nick Earl, President and Chief Executive Officer

Date: March 10, 2017 By: /s/ Eric R. Ludwig  
Eric R. Ludwig, Executive Vice President, Chief Operating Officer and Chief Financial Officer

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## POWER OF ATTORNEY

By signing this Annual Report on Form 10-K below, I hereby appoint each of Nick Earl, Eric R. Ludwig and Scott J. Leichtner as my attorney-in-fact to sign all amendments to this Form 10-K on my behalf, and to file this Form 10-K (including all exhibits and other documents related to the Form 10-K) with the Securities and Exchange Commission. I authorize each of my attorneys-in-fact to (1) appoint a substitute attorney-in-fact for himself and (2) perform any actions that he believes are necessary or appropriate to carry out the intention and purpose of this Power of Attorney. I ratify and confirm all lawful actions taken directly or indirectly by my attorneys-in-fact and by any properly appointed substitute attorneys-in-fact.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacity and on the dates indicated.

Signature	Title	Date
/s/ Nick Earl Nick Earl	President, Chief Executive Officer and Director (Principal Executive Officer)	March 10, 2017
	EVP, Chief Operating Officer and Chief Financial Officer	March 10, 2017
/s/ Eric R. Ludwig Eric R. Ludwig	(Principal Financial Officer)	
	Vice President of Finance	March 10, 2017
/s/ Gregory J. Cannon Gregory J. Cannon	and Investor Relations (Principal Accounting Officer)	
/s/ Niccolo de Masi Niccolo de Masi	Chairman	March 10, 2017
/s/ Benjamin T. Smith IV Benjamin T. Smith IV	Lead Director	March 10, 2017
/s/ Eric R. Ball Eric R. Ball	Director	March 10, 2017

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/s/ Greg Brandeau Greg Brandeau	Director	March 10, 2017
Ben Feder	Director	March 10, 2017
/s/ Ann Mather Ann Mather	Director	March 10, 2017
/s/ Hany M. Nada Hany M. Nada	Director	March 10, 2017



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Exhibit Index

Exhibit Number	Exhibit Description	Incorporated by Reference			Filing Date	Filed Herewith
		Form	File No.	Exhibit		
2.01	Agreement and Plan of Merger, dated as of April 30, 2014 by and among Glu Mobile Inc., Midas Acquisition Corp., PlayFirst, Inc. and Fortis Advisors LLC	8-K	001-33368	2.01	05/02/14	
2.02	Agreement and Plan of Merger and Reorganization, dated as of July 30, 2014 by and among Glu Mobile Inc., Cardinals Acquisition Merger Corporation, Cardinals Acquisition Merger LLC, Cie Digital Labs, LLC, Cie Games, Inc. and Shareholder Representative Services, LLC	8-K	001-33368	2.01	07/30/14	
2.03	Stock Transfer Agreement by and among Glu Mobile Inc., Time Warner Inc., Intel Capital Corporation and certain other stockholders of Crowdstar Inc., dated November 2, 2016.	8-K	001-33308	2.01	11/03/16	
3.01	Restated Certificate of Incorporation of Glu Mobile Inc.	S-1/A	333-139493	3.02	02/14/07	
3.02	Amended and Restated Bylaws of Glu Mobile Inc., adopted on March 7, 2014.	8-K	001-33368	99.01	03/13/14	
4.01	Form of Registrant's Common Stock Certificate.	S-1/A	333-139493	4.01	02/14/07	
10.01#	Form of Indemnity Agreement entered into between Glu Mobile Inc. and each of its directors and executive officers, effective as of October 24, 2013.	8-K	001-33368	99.01	10/29/13	
10.02(A)#	Amended & Restated 2007 Equity Incentive Plan, as amended through June 4, 2015.	10-Q	001-33368	10.03	08/07/15	
10.02(B)#	For the 2007 Equity Incentive Plan, forms of (a) Notice of Stock Option Grant, Stock Option Award Agreement and Stock Option Exercise Agreement, (b) Notice of Restricted Stock Award and Restricted Stock Agreement, (c) Notice of Stock Appreciation Right Award and Stock Appreciation Right Award Agreement and (d) Notice of Stock Bonus Award and Stock Bonus Agreement.	S-1/A	333-139493	10.03	02/16/07	

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10.02(C)#	For the 2007 Equity Incentive Plan, form of Notice of Restricted Stock Unit Award and Restricted Stock Unit Agreement	10-Q	001-33368	10.08	08/09/13
10.03#	2007 Employee Stock Purchase Plan, as amended and restated on August 1, 2011.	10-K	001-33368	10.04	03/14/12
10.04(A)#	2008 Equity Inducement Plan, as amended effective November 14, 2016.	8-K	001-33368	99.01	11/18/16

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10.04(B)#	For the 2008 Equity Inducement Plan, forms of Notice of Stock Option Grant, Stock Option Award Agreement and Stock Option Exercise Agreement.	10-K	001-33368	10.05	03/21/10	
10.04(C)#	For the 2008 Equity Inducement Plan, form of Notice of Restricted Stock Unit Award and Restricted Stock Unit Award Agreement.	10-K	001-33368	10.05	03/14/14	
10.05#	Forms of Stock Option Award Agreement (Immediately Exercisable) and Stock Option Exercise Agreement (Immediately Exercisable) under the Glu Mobile Inc. 2007 Equity Incentive Plan.	10-Q	001-33368	10.05	08/14/08	
10.06#	Executive Chairman Agreement between Glu Mobile Inc. and Niccolo M. de Masi, dated November 2, 2016.	8-K	001-33368	10.01	11/03/16	
10.07#	Summary of Compensation Terms of Nick Earl.	8-K	001-33368	99.01	02/03/17	
10.08#	Executive Employment Agreement, effective as of November 10, 2016, by and between Glu Mobile Inc. and Nick Earl.					X
10.09#	Change of Control Severance Agreement between Glu Mobile Inc. and Nick Earl, effective as of November 10, 2016.					X
10.10#	Summary of Change of Control Severance Agreement between Glu Mobile Inc. and Nick Earl, dated as of February 8, 2016.	10-K	001-33368	10.20	03/04/16	
10.11#	Summary of Compensation Terms of Eric R. Ludwig.	8-K	001-33368	99.01	02/03/17	
10.12#	Change of Control Severance Agreement, dated as of October 10, 2008, between Glu Mobile Inc. and Eric R. Ludwig.	10-K	001-33368	10.09	03/13/09	
10.13#	Amendment, dated as of July 7, 2011, to Change of Control and Severance Agreement between Glu Mobile Inc. and Eric R. Ludwig, dated as of October 10, 2008.	10-Q	001-33368	10.02	11/14/11	
10.14#	Summary of Compensation Terms of Chris Akhavan.	8-K	001-33368	99.01	02/03/17	
10.15#	Change of Control Severance Agreement between Glu Mobile Inc. and Chris Akhavan, dated as of April 22, 2013.	10-Q	001-33368	10.02	08/09/13	
10.16#	Summary of Compensation Terms of Tim Wilson.	8-K	001-33368	99.01	02/03/17	
10.17#	Change of Control Severance Agreement between Glu Mobile Inc. and Tim Wilson, effective as of November 10, 2015.					X
10.18#	Summary of Compensation Terms of Scott J. Leichtner.	8-K	001-33368	99.01	02/03/17	

10.19# Summary of Change of Control Severance Arrangement between 10-K 001-33368 10.15 03/15/13  
Glu Mobile Inc. and Scott J. Leichtner, dated as of July 7, 2011.

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10.20#	Amended and Restated Glu Mobile Inc. 2016 Executive Bonus Plan	8-K	001-33368	99.01	05/13/16
10.21#	Glu Mobile Inc. 2017 Executive Bonus Plan	8-K	001-33368	99.01	02/03/17
10.22#	Non-Employee Director Compensation Program, effective as of October 1, 2013.	10-K	001-33368	10.23	03/14/14
10.23	Sublease between Oracle America, Inc. and Glu Mobile Inc., dated as of April 16, 2013.	8-K	001-33368	99.01	04/22/13
10.24	Common Stock Warrant, between Glu Mobile Inc. and MGM Interactive Inc., dated as of July 15, 2013.	S-3	333-190545	4.03	08/09/13
10.25	iOS Developer Program License Agreement between Glu Games Inc. and Apple Inc., as amended to date.	10-K	001-33368	10.27	03/15/13
10.26	Android Market Developer Distribution Agreement between Glu Games Inc. and Google Inc., as amended to date.	10-K	001-33368	10.28	03/15/13
10.27+	License Agreement, dated as of March 31, 2012, by and between Glu Mobile Inc. and Atari, Inc.	10-Q/A	001-33368	10.01	10/12/12
10.28+	Trademark and Domain Name Assignment and License Agreement, dated as of March 31, 2012, by and between Glu Mobile Inc. and Atari Inc.	10-Q	001-33368	10.02	08/09/12
10.29+	Unity Technologies Software License Agreement between Glu Mobile Inc. and Unity Technologies ApS, dated as of October 29, 2012, as amended effective October 29, 2014 and December 18, 2014.	10-K	001-33368	10.33	03/13/15
10.30+	License Agreement, dated as of November 5, 2013, by and between Glu and Kimsaprincess, Inc., as amended June 13, 2014 and September 2, 2014.	10-Q	001-33368	10.01	11/10/14
10.31+	Amendment No. 3 dated September 16, 2016 to License Agreement, dated as of November 5, 2013, by and between Glu and Kimsaprincess, Inc., as previously amended June 13, 2014 and September 2, 2014.	10-Q	001-33368	10.01	11/09/16
21.01	List of Subsidiaries of Glu Mobile Inc.				X
23.01	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm.				X

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24.01	Power of Attorney (see the Signature Page to this report).	
31.01	Certification of Principal Executive Officer Pursuant to Securities Exchange Act Rule 13a-14(a).	X
31.02	Certification of Principal Financial Officer Pursuant to Securities Exchange Act Rule 13a-14(a).	X

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32.01	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350 and Securities Exchange Act Rule 13a-14(a)/15d-14(a).*	X
32.02	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350 and Securities Exchange Act Rule 13a-14(a)/15d-14(a). *	X
101.INS	XBRL Report Instance Document	X
101.SCH	XBRL Taxonomy Extension Schema Document	X
101.CAL	XBRL Taxonomy Calculation Linkbase Document	X
101.LAB	XBRL Taxonomy Label Linkbase Document	X
101.PRE	XBRL Presentation Linkbase Document	X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X

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#Indicates a management compensatory plan or arrangement.

+Certain portions of this exhibit have been omitted and have been filed separately with the SEC pursuant to an order granting confidential treatment issued by the SEC under Rule 24b-2 as promulgated under the Exchange Act.

\*This certification is not deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that Glu Mobile Inc. specifically incorporates it by reference.