

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

- Registration Statement Pursuant to Section 12(b) or (g) of the Securities Exchange Act of 1934
- Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
for the Fiscal Year Ended December 31, 2021
- Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
- Shell Company Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission File Number: 001-39349

DoubleDown Interactive Co., Ltd.

(Exact name of registrant as specified in its charter)

Republic of Korea
(Jurisdiction of incorporation or organization)

13F, Gangnam Finance Center
152, Teheran-ro Gangnam-gu
Seoul 06236, Republic of Korea
+82-2-501-7216

(Address of principal executive offices)

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c/o DoubleDown Interactive, LLC
605 5th Avenue, Suite 300
Seattle, Washington 98104
+1-206-408-1545

(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act: None

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

American Depositary Shares, or ADSs, each twenty (20) ADSs representing the right to receive one (1) Common Share

Common Shares, par value ~~₩~~10,000 per share
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

As of December 31, 2021, there were 2,477,672 Common Shares, par value ~~₩~~10,000 per share, issued and outstanding.

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

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes No

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

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

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

Large accelerated filer Accelerated filer Non-accelerated filer
Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards[†] provided pursuant to Section 13(a) of the Exchange Act.

[†] The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as Issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

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About this annual report

As used in this annual report, unless the context otherwise requires or otherwise states, (a) references to “we,” “us,” “our,” the “Company,” “our Company” and similar references refer to DoubleDown Interactive Co., Ltd., a corporation with limited liability organized under the laws of Korea, which is sometimes referred to in this annual report as “DDI,” its Korean subsidiary, Double8 Games Co., Ltd. (“Double8 Games”), and its U.S. subsidiaries, DoubleUDiamond, LLC, a Delaware limited liability company (“DUD”), and DoubleDown Interactive, LLC, a Washington limited liability company (“DDI-US”), and (b) references to “DoubleU Games” or “DUG” refer to DoubleU Games Co., Ltd., a Korean company and our controlling shareholder.

References herein to “STIC” refer to STIC Special Situation Private Equity Fund and its wholly-owned affiliate, unless the context otherwise requires.

We have made rounding adjustments to some of the figures included in this annual report. Accordingly, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that precede them. The terms “dollar,” “USD,” “US\$” or “\$” refer to the legal currency of the United States. Currency amounts in this annual report are stated in dollars, unless otherwise indicated. Our reporting currency is the U.S. dollar, and our functional currency is the Korean Won, or KRW or “(Won).” Unless otherwise indicated, convenience translations included in this annual report of Korean Won into U.S. dollars have been made at the rate of ₩1,188.59 = US\$1.00, as reported by the Board of Governors of the Federal Reserve System on December 31, 2021. Historical and current exchange rate information of the Korean Won against the U.S. dollar may be found at https://www.federalreserve.gov/releases/h10/hist/dat00_ko.htm.

Our financial statements are prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. Our fiscal year ends on December 31 of each year as does our reporting year. Therefore, any references to 2021, 2020 and 2019 are references to the fiscal and reporting years ended December 31, 2021, December 31, 2020 and December 31, 2019, respectively. See Note 2 to our Consolidated Financial Statements for a discussion of the basis of presentation, functional currency and translation of financial statements.

Non-GAAP measures

In addition to U.S. GAAP measures, we also use Adjusted EBITDA, as described under “Item 5. Operating and financial review and prospects—Other key performance indicators and non-GAAP metrics and trends—Adjusted EBITDA,” and Adjusted EBITDA margin in various places in this annual report. These financial measures are presented as supplemental disclosure and should not be considered in isolation of, as a substitute for, or superior to, the financial information prepared in accordance with U.S. GAAP, and should be read in conjunction with the financial statements included elsewhere in this annual report. Adjusted EBITDA and Adjusted EBITDA margin may differ from similarly titled measures presented by other companies.

Please see “Item 5B. Operating results—Reconciliation of non-GAAP measures” for a reconciliation of non-GAAP financial measures to the most directly comparable financial measure calculated in accordance with U.S. GAAP.

Market and industry data

This annual report contains references to industry market data and certain industry forecasts. Industry market data and industry forecasts are obtained from publicly available information and industry publications. Industry publications generally state that the information contained therein has been obtained from sources believed to be reliable, but that the accuracy and completeness of that information is not guaranteed. Although we believe industry information to be accurate, it is not independently verified by us. In general, we believe there is less publicly available information concerning international social gaming industries than the same industries in the United States. Some data is also based on our good faith estimates, which are derived from our review of internal

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surveys or data, as well as the independent sources referenced above. Assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Item 3D. Risk factors." These and other factors could cause future performance to differ materially from our assumptions and estimates. See "Cautionary note regarding forward-looking statements."

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Various statements contained in this annual report, including those that express a belief, expectation or intention, as well as those that are not statements of historical fact, are forward-looking statements. These forward-looking statements may include projections and estimates concerning our possible or assumed future results of operations, financial condition, business strategies and plans, market opportunity, competitive position, industry environment, and potential growth opportunities. In some cases, you can identify forward-looking statements by terms such as “may”, “will”, “should”, “believe”, “expect”, “could”, “intend”, “plan”, “anticipate”, “estimate”, “continue”, “predict”, “project”, “potential”, “target,” “goal” or other words that convey the uncertainty of future events or outcomes. You can also identify forward-looking statements by discussions of strategy, plans or intentions. We have based these forward-looking statements on our current expectations and assumptions about future events. While our management considers these expectations and assumptions to be reasonable, because forward-looking statements relate to matters that have not yet occurred, they are inherently subject to significant business, competitive, economic, regulatory and other risks, contingencies and uncertainties, most of which are difficult to predict and many of which are beyond our control. These and other important factors, including, among others, those discussed in this annual report under the headings “Risk Factors”, “Operating and Financial Review and Prospects” and “Our Business”, may cause our actual results, performance or achievements to differ materially from any future results, performance or achievements expressed or implied by the forward-looking statements in this annual report. Some of the factors that could cause actual results to differ materially from those expressed or implied by the forward-looking statements in this annual report include:

- the impact of the COVID-19 pandemic and any resulting social, political, economic and financial complications;
- our ability to attract and retain players;
- our expectations regarding the growth rates of our active users, payer conversion rate and revenue per daily active user;
- our reliance on third-party platforms;
- our ability to continue to launch and enhance games that attract and retain a significant number of paying players;
- our reliance on a small percentage of our players for nearly all of our revenue;
- our ability to adapt to, and offer games that keep pace with, changing technology and evolving industry standards;
- competition;
- our ability to use the intellectual property rights of our controlling shareholder, DoubleU Games, and other third parties, including the third-party intellectual property rights licensed to us by International Game Technology PLC (“IGT”);
- protection of our proprietary information and intellectual property, inability to license third-party intellectual property and the intellectual property rights of others;
- security and integrity of our games and systems;
- security breaches, cyber-attacks or other privacy or data security incidents, challenges or disruptions;
- reliance on or failures in information technology and other systems;
- the impact of legal and regulatory restrictions on our business, including significant opposition in some jurisdictions to interactive social gaming, including social casino gaming, and how such opposition could lead these jurisdictions to adopt legislation or impose a regulatory framework to govern interactive social gaming or social casino gaming specifically, and how this could result in a

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prohibition on interactive social gaming or social casino gaming altogether, restrict our ability to advertise our games, or substantially increase our costs to comply with these regulations;

- laws and government regulations, both foreign and domestic, and to data privacy and security, including with respect to the collection, storage, use, transmission, sharing and protection of personal information and other consumer data, and those laws and regulations that affect companies conducting business on the internet, including ours;
- the continuing evolution of the scope of data privacy and security regulations, and our belief that the adoption of increasingly restrictive regulations in this area is likely within the U.S. and other jurisdictions;
- our ability to complete acquisitions and integrate businesses successfully;
- our ability to pursue and execute new business initiatives; and
- U.S. and international economic and industry conditions.

Given the foregoing risks and uncertainties, you are cautioned not to place undue reliance on the forward-looking statements in this annual report. The forward-looking statements contained in this annual report are not guarantees of future performance and our actual results of operations and financial condition may differ materially from such forward-looking statements. In addition, even if our results of operations and financial condition are consistent with the forward-looking statements in this annual report, they may not be predictive of results or developments in future periods.

Any forward-looking statement that we make in this annual report speaks only as of the date of this annual report. Except as required by law, we do not undertake any obligation to update or revise, or to publicly announce any update or revision to, any of the forward-looking statements in this annual report, whether as a result of new information, future events or otherwise, after the date of this annual report.

PART I.

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. [RESERVED]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

We operate in a dynamic and rapidly changing industry that involves numerous risks and uncertainties. You should carefully consider the factors described below, together with all of the other information contained in this annual report, including the audited and unaudited financial statements and the related notes included in this annual report. These risk factors are not presented in the order of importance or probability of occurrence. If any of the following risks actually occurs, our business, financial condition and results of operations could be materially and adversely affected. Some statements in this annual report, including statements in the following risk factors, constitute forward-looking statements. Please refer to the section entitled “Cautionary Note Regarding Forward-Looking Statements.”

As used in this annual report, the terms “the Company”, “our Company”, “DDI”, “we”, “our” or “us” may, depending upon the context, refer solely to the Company, to one or more of the Company’s consolidated subsidiaries or to all of them taken as a whole.

Summary Risk Factors

The following is a summary of some of the risks and uncertainties that could materially adversely affect our business, financial condition and results of operations. You should read this summary together with the more detailed description of each risk factor contained below.

- Our profitability may be affected by the rate and manner at which we successfully manage our current and future growth.
- We rely on a small percentage of our players for all of our revenue.
- To date, we have been reliant upon our DoubleDown Casino game for substantially all of our revenue.
- We rely substantially on third-party platforms to make our games available to players and to collect revenue.
- Legal proceedings may have a material adverse impact on our business.
- Social opposition to interactive gaming could limit our growth and impact the future of our business.

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- We rely on the ability to use the intellectual property of third parties, particularly IGT and DUG, for a substantial portion of our content and other features incorporated into our games.
- Our business depends on our ability to protect proprietary information and our owned and licensed intellectual property.
- The intellectual property rights of others may prevent us from developing new games and/or entering new markets, or may expose us to costly litigation.
- Our success depends upon our ability to adapt to and offer games that keep pace with changing technology and evolving industry standards.
- Data privacy and security laws and regulations could increase the cost of our operations and subject us to possible sanctions or penalties.
- We operate in a highly competitive industry, and our success depends on our ability to effectively compete.
- Our success depends on the security and integrity of the games we offer, and cyber-attacks, security breaches, or other disruptions could compromise our information or the information of our players and expose us to liability, which would cause our business and reputation to suffer.

Risks Related to Our Business and Industry

Our profitability may be affected by the rate at which we grow our business. The inability to successfully manage our current and future growth may materially and adversely affect our results of operations and financial condition.

We have grown the business since the acquisition of DDI-US from IGT in 2017 and we intend to continue to expand the scope and geographic relevance of the games we provide. Our total revenue increased to \$363.2 million in 2021 from approximately \$358.3 million in 2020. Achieving our growth strategy will depend, in large part, upon the rate at which we are able to attract and retain paying players to our games, create engaging content, and expand geographically.

Our ability to increase the number of players of our games will depend on continued player adoption of online social casino and other forms of casual online gaming. Growth in the online gaming industry and the level of demand for and market acceptance of our games are subject to a high degree of uncertainty. We expect that the overall number of our customers and the amount they are willing to invest in our games will fluctuate from time to time. The rate at which we acquire paying players may be affected by increased competition, general economic conditions, or other factors. In addition, we may not be successful in providing sufficient incentives and creating engaging content to retain our existing customers and attract new customers. If we are unable to successfully acquire, retain, and monetize players who make purchases in our games, our operations and financial condition will be adversely affected and our profitability may decline.

In addition, we hope to grow our player base through geographic expansion of our markets, particularly in Asia-Pacific and Western Europe. However, significant growth in such markets may not be successful if we do not plan the timing of the expansion appropriately, understand the social and other factors driving player participation in such markets so that we can adapt our content accordingly, and effectively navigate the regulatory environment in which we may be required to operate. If we are unable to properly and prudently manage our operations as we continue to grow, if the quality of our games deteriorates, or if we are unable to provide suitable incentives and content, our name and reputation could be severely harmed, and our business, prospects, financial condition, and results of operations could be adversely affected.

We rely on a small percentage of our players for all of our revenue.

Our games are available to players for free, and we generate revenue from players only if they voluntarily purchase virtual chips above and beyond the level of free virtual chips provided periodically as part

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of the games. In particular, we monitor the number of players who make a purchase to assess any periodic changes in behavior and associated trends. Average MPUs, or the average number of players who made a purchase at least once in a month, decreased from 2020 to 2021. Further, our overall payer conversion rate during fiscal years 2020 and 2021 has increased from 5.4% in 2020 to 5.7% in 2021. Our paying players may stop making purchases in our games or playing our games altogether at any time. In order to sustain or increase our revenue levels, we must increase the amount our players spend in our games and/or increase the number of players who purchase virtual chips. To retain paying players, we must devote significant resources so that the games they play retain their interest and motivate them to purchase virtual chips through incentives and engaging content. If the average amount spent by our paying players declines, if we fail to offer games that sufficiently incentivize players to purchase our virtual chips, or if we fail to properly manage the economics of free versus paid chips, our business, financial condition, and results of operations could be materially and adversely affected.

Our DoubleDown Casino game has generated substantially all of our revenue, and we intend to continue to refresh content and launch new games in order to attract and retain a significant number of paying players to grow our revenue and sustain our competitive position.

Historically, *DoubleDown Casino* has accounted for substantially all our revenue (2021: 96.6%; 2020: 95.7%), and we expect that this dependency will continue for the foreseeable future while we endeavor to further diversify our portfolio through the addition of new games. See “Item 4B. Business overview—Our games.” Our growth will depend, in part, on our ability to consistently refresh content for our existing games to promote engagement with our players, as well as launch new games that achieve significant popularity. However, as we add new games to our portfolio, certain of our players may leave existing games, such as *DoubleDown Casino*, and move to a new offering. As we refresh content and develop new games, we expend significant resources in research and development, analytics, marketing, and others to design, test, and launch refreshed content and our new games.

Our ability to successfully and timely design, test, and launch our games and provide refreshed content, as well as attract and retain paying players, largely depends on our ability to, among other things:

- analyze player demographics and effectively respond to changing player interests and preferences and the competitive landscape;
- enhance existing games with refreshed content and develop new games that, in each case, are interesting and compelling and that incentivize players to purchase virtual chips on a regular basis;
- effectively develop new social and geographic markets for our games;
- minimize delays and cost overruns on development and launch of refreshed content for existing games and of new games; and
- expand our proprietary portfolio of games through organic growth and licensed third-party content.

If we do not successfully extend the life of our existing games and launch games that attract and retain a significant number of paying players, our market share, reputation, and financial results could be harmed. In addition, if the popularity of any of our most successful games decreases significantly, it would have a material adverse effect on our results of operations, cash flows, and financial condition. We cannot assure that our initiatives to improve our player experience will always be successful.

We rely substantially on third-party platforms to make our games available to players and to collect revenue.

Our games are distributed through several main platform providers, including Apple, Facebook, Google, and Amazon, which also provide us valuable information and data, such as the rankings of our games. Substantially all of our revenue is generated by players using those platforms. Consequently, our expansion and prospects depend on our continued relationships with these providers, and any emerging platform providers that are widely adopted by our target player base in the geographic markets in which we operate.

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We are subject to the standard terms and conditions that these platform providers have for application developers, which govern the promotion, distribution and operation of games and other applications on their platforms, and which the platform providers can change unilaterally on short or no notice. Our business would be harmed if:

- the platform providers discontinue or limit our access to their platforms;
- governments or private parties, such as internet providers, impose bandwidth restrictions, increase charges, or restrict or prohibit access to those platforms;
- the platforms modify their current discovery mechanisms, communication channels available to developers, respective terms of service, or other policies, including fees;
- the platforms adopt changes or updates to their technology that impede integration with other software systems, such as Adobe Flash or others, or otherwise require us to modify our technology or update our games in order to ensure players can continue to access our games and content with ease;
- the platforms impose restrictions or make it more difficult for players to buy our virtual chips; or
- the platforms develop their own competitive offerings.

If alternative platforms increase in popularity, we could be adversely impacted if we fail to create compatible versions of our games in a timely manner, or if we fail to establish a relationship with such alternative platforms. Likewise, if our existing platform providers alter their operating platforms or browsers, we could be adversely impacted as our offerings may not be compatible with the altered platforms or browsers or may require significant and costly modifications in order to become compatible. If our platform providers were to develop competitive offerings, either on their own or in cooperation with one or more competitors, our growth prospects could be negatively impacted. If our platform providers do not perform their obligations in accordance with our platform agreements, we could be adversely impacted.

In the past, some of these providers' platforms have been unavailable for short periods of time or experienced issues with certain features. If such events occur on a prolonged basis or other similar issues arise that impact players' ability to download our games, access social features, or purchase virtual chips, it could have a material adverse effect on our revenue, operating results, and reputation.

Depending on their outcomes, certain legal proceedings can materially adversely affect our business and our results of operations, cash flows, and financial condition.

We have been party to, are currently party to, and in the future may become subject to additional, legal proceedings in the operation of our business, including, but not limited to, with respect to consumer protection, gaming-related matters, employee matters, alleged service and system malfunctions, alleged intellectual property infringement, and claims relating to our contracts, licenses, and strategic investments.

For example, in 2015, a plaintiff commenced a putative class action in the United States District Court for the Western District of Washington against Churchill Downs Incorporated, one of our competitors, alleging that Churchill Downs' virtual game platform, "Big Fish Casino," violated Washington's Recovery of Money Lost at Gambling Act ("WRMLGA") and Consumer Protection Act ("CPA"). The District Court dismissed plaintiff's action. On March 28, 2018, the United States Court of Appeals for the Ninth Circuit reversed the District Court's holding, concluding that, because Big Fish Casino's virtual chips are a "thing of value," Big Fish Casino falls under the WRMLGA. The Ninth Circuit remanded the action to the District Court for further proceedings consistent with its opinion. On March 4, 2020, plaintiff's motion for class certification was denied by the District Court without prejudice to refile. Additional class actions have been commenced against other of our competitors on similar grounds, certain of which, including Churchill Downs, have finalized settlements which the court approved on February 11, 2021 in amounts of \$6.5 million, \$38.0 million, and \$155.0 million. These settlements included requirements for modifications to the games that allowed them to continue to operate.

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We have assessed these required modifications and have already implemented these changes to the ways our DoubleDown Casino game operates. Such amounts are illustrative only and are not indicative of, and provide no certainty with respect to, amounts at which other cases, including the *Benson* case discussed below, may settle, if at all, or amounts that may be rendered in a judgment after trial on the merits.

In April 2018, a putative class action lawsuit, *Benson, et al. v. DoubleDown Interactive and International Game Technology*, was filed against DDI-US in the United States District Court for the Western District of Washington based upon the theory, like Big Fish Casino, that the use of the DoubleDown Casino Facebook and mobile applications violated the WRMLGA and CPA. The plaintiffs make their allegations on behalf of themselves and “all persons in the United States who purchased and lost chips by wagering at the DoubleDown Casino.” Plaintiffs seek to recover, on behalf of themselves and the class, among other things, (i) all money they wagered and lost playing DDI-US games; and (ii) treble damages. Plaintiffs also seek injunctive and/or declaratory relief as necessary to protect the interests of Plaintiff and the class. On November 13, 2018, the District Court denied DDI-US’s motion to compel arbitration. DDI-US filed an appeal to the United States Court of Appeals for the Ninth Circuit, arguing that plaintiff’s action should have been dismissed because their individual cases are subject to the arbitration agreement in the applicable Terms of Use. On January 29, 2020, DDI-US’s appeal to the Ninth Circuit was denied and the case was remanded to the District Court for further proceedings. On June 17, 2020, the Company filed a motion in the United States District Court for the Western District of Washington, which, if granted, would certify certain questions of state law to the Washington State Supreme Court for interpretation in accordance with applicable state law. On August 11, 2020, the District Court denied DDI-US’s motion to certify certain questions to the Washington State Supreme Court. DDI-US subsequently filed a motion asking the court to reconsider this decision. On January 15, 2021, this motion for reconsideration was denied. On August 13, 2020, DDI-US filed a motion to strike the plaintiffs’ nationwide class allegations. On March 19, 2021, this motion was denied. On September 10, 2020, DDI-US filed a complaint in Washington State court against the two plaintiffs in the federal court case arguing that, since the gambling law referenced in the federal action is a Washington state law, any complaint should be litigated in Washington State court. On February 25, 2021, plaintiffs filed a motion for class certification and for preliminary injunction. Discovery in the federal court case has commenced and is continuing. On July 19, 2021, the court ordered that the parties hold a settlement conference by September 7, 2021. On April 25, 2021, plaintiffs filed their Second Amended Complaint, changing their allegations to include an additional corporate entity of co-defendant, IGT. DDI-US served plaintiffs with its expert disclosures and filed an Opposition to Plaintiffs’ Motion for Class Certification and Preliminary Injunction on May 11, 2021. On June 29, 2021, the court denied the Company’s motion for the certification of an interlocutory appeal from the court’s order denying the Company’s Motion to Strike Nationwide Class Action Allegations. No trial date has been set at this time. We dispute any allegation of wrongdoing and will continue to vigorously defend ourselves in this matter.

In connection with the *Benson* case, IGT tendered us its defense of the lawsuit and sought indemnity from us and certain of our affiliates for any damages from the lawsuit, based on various agreements associated with IGT’s sale of DDI-US to us. We had previously tendered IGT our defense and sought indemnity from it. The parties have entered into a standstill or tolling agreement, which expired on September 1, 2021, and was extended by agreement until October 1, 2021. On December 20, 2021, IGT submitted a demand for mediation to DDI-US.

We have incurred and expect to continue to incur significant expense defending the *Benson* lawsuit, and we may incur in the future significant expense with respect to any other lawsuits to which we may become a party. In general, subject to certain terms and conditions, insurance coverage for our litigation expenses and losses arising out of legal proceedings is assessed by our insurers on a case by case basis and there can be no guarantee that coverage will be available in any particular case. However, in connection with the *Benson* lawsuit, our insurer will not cover such expenses or any losses that could arise for any settlement amount or damages award.

The resolution of the *Benson* lawsuit, whether through the court or through settlement, could have a material adverse effect on our operating results and financial condition. As set out in Note 11 to the audited

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consolidated financial statements for the years ended December 31, 2021, 2020 and 2019, the Company has recorded a charge to income for this litigation, which is included in general and administrative expenses. However, the Company may experience a loss in excess of the amount recorded, which could be material; the ultimate outcome cannot be known at this time due to the significant incomplete, uncertain, and unknown variables inherent with this stage of the pending litigation. The amount recorded represents management's estimate, in accordance with applicable accounting standards, of the low end of the reasonably possible range of loss of \$3.5 million to \$201.5 million. Management will continue to evaluate the reasonably possible range of loss and the amount recorded as the litigation proceeds over time, potentially resulting in a material adjustment thereto. As noted above, our operating results and financial condition could be materially adversely impacted by the resolution of the *Benson* case. We continue to dispute any allegation of wrongdoing and we intend to continue our vigorous defense in this matter. There can be no guarantee that, in such an event, we will be able to recover all or any part of any damages award or, if applicable, settlement amount, or obtain a contribution with respect thereto, from any other defendant. Additionally, there can be no guarantee as to what, if any, additional modifications any judgments or settlements might impose on one or more of our games.

In the future, additional legal proceedings or regulatory investigations targeting our social casino games and claiming violations of state or federal laws could also occur in other states, based on the unique and particular laws of each jurisdiction. We could, in connection with any such proceedings or regulatory actions, including as a result of the *Benson* case, be restricted from operating social casino games in certain states, or be required to make modifications to the operation of one or more of our games, or have to pay significant damage awards or settlement amounts. We cannot predict the likelihood, timing, or scope of the consequences of such an outcome, or the outcome of any other legal proceedings to which we may be a party, any of which could have a material adverse effect on our results of operations, cash flows, or financial condition.

In addition, in December 2020, a patent infringement claim, *NEXRF Corp. v. DoubleU Games Co., Ltd., et al.*, was filed against DoubleU Games, DDI-US and us in the United States District Court for the Western District of Washington. The plaintiff alleges that the defendants are infringing certain patents related to certain of its games and is seeking monetary damages. On April 29, 2021, we, DoubleU Games, and DDI-US filed a motion to dismiss the case as well as a motion to stay discovery pending adjudication of motion to dismiss. The parties agreed to an interim stay of discovery pending resolution of the motion to stay. During the pendency of the defendants' motions, however, a federal court in Nevada issued an order invalidating the asserted patents on the basis of patent ineligibility. The plaintiff has appealed this ruling to the federal circuit. The parties agreed to stay the litigation pending the outcome of the plaintiff's appeal of the Nevada decision. The case is now stayed, effective September 3, 2021. We intend to defend the case vigorously.

On May 14, 2021, Hanover Insurance Co. filed a declaratory judgment action alleging that its insurance policy does not cover the claims made by *NEXRF Corp. v. DoubleU Games Co., Ltd., et al.* The plaintiff requested that defendants sign a waiver of service. The defendants have responded to the plaintiff's request.

Certain social opposition to interactive gaming or potential issues relating to social casino games could adversely impact our business and limit the growth of our operations.

There is certain opposition in some jurisdictions to interactive online gaming, including social casino games. In September 2018, the World Health Organization added "gaming disorder" to the International Classification of Diseases, defining the disorder as a pattern of behavior characterized by impaired control over gaming and an increase in the priority of gaming over other interests and daily activities. Some states or countries have anti-gaming groups that specifically target social casino games. Such opposition could lead these jurisdictions to adopt legislation or impose a regulatory framework to govern interactive social gaming or social casino games specifically and which could require us to comply with stringent regulations and/or require us to modify our operations in order to comply. These could result in a prohibition on interactive online gaming or social casino games altogether, restrict our ability to advertise our games, encourage our existing platform partners to restrict our ability to deploy our games through their media, or substantially increase our costs to comply with these regulations, all of which could have an adverse effect on our results of operations, cash flows, and financial condition. We cannot predict the likelihood, timing, scope, or terms of any such legislation or

regulation or the extent to which they may affect our business. In addition, certain third-party distribution platforms on which we rely have had lawsuits brought against them for servicing social casino games, which may limit our access to such platforms.

On September 17, 2018, 15 international gambling regulators, plus the Washington State Gambling Commission, signed a declaration expressing concern “with the risks posed by the blurring of lines between gambling and other forms of digital entertainments such as video gaming,” including, among others, social casino gaming. The regulators committed to work together to analyze the characteristics of video games and social gaming, and to engage in an informed dialogue with the video game and social gaming industries to ensure the appropriate and efficient implementation of applicable laws and regulations. The regulators also indicated they would work closely with their consumer protection enforcement agencies. We cannot predict the likelihood, timing, scope, or terms of any actions taken as a result of the declaration.

Consumer protection concerns regarding games such as ours have been raised in the past and may again be raised in the future. These concerns include (i) whether social casino games may be shown to serve as a gateway for adolescents to monetary gambling, and (ii) a concern that social casino gaming companies are using big data and advanced technology to predict and target “vulnerable” users who may spend significant time and money on social casino games in lieu of other activities. Such concerns could lead to increased scrutiny, including the potential imposition of a regulatory framework, over the manner in which our games are designed, developed, distributed, and presented. It is difficult for us to monitor and enforce age or other jurisdictional restrictions with respect to players who download or play our games, as we rely on third-party distribution platforms such as Apple App Store, Facebook, Google Play Store, and Amazon Appstore. We cannot predict the likelihood, timing, or scope of any concern reaching a level that will impact our business, or whether, as a result, we would suffer any adverse impacts to our results of operations, cash flows, financial condition, and reputation.

We rely on the ability to use the intellectual property rights of third parties, and we may lose the benefit of some of the intellectual property licensed to us if the license agreements are terminated.

Substantially all of the content and related intellectual property incorporated into our games are licensed from third parties, in particular IGT and DUG. Since June 2017, we have been party to a Game Development, Distribution and Services Agreement with IGT (which we refer to as the “IP License Agreement”), pursuant to which we are granted the right to develop and distribute certain IGT game titles and related intellectual property. Under the IP License Agreement, we expect, but cannot guarantee, that we will be able to continue to receive those rights on favorable or reasonable terms. In addition, although IGT has the right to terminate the IP License Agreement for cause, we will retain exclusive, perpetual, and irrevocable use of any IGT intellectual property already used by us for games launched before June 1, 2020 (excluding third party rights that IGT no longer has rights to itself), except in limited circumstances. For each slot game first launched in the social online game field starting on June 1, 2020, the license from IGT is non-exclusive, perpetual and irrevocable. See “Item 4B. Business overview—Intellectual property.” In addition, we have licensing arrangements with our controlling shareholder, DUG, since March 2018, pursuant to which we are granted an exclusive license to develop and distribute certain of their social casino game titles and sequels, subject to our payment of customary terms and license fees. As of December 31, 2021, we license approximately 42 game titles that are actively offered to players. As amended to date, the agreement remains in effect until either DUG no longer holds an interest, directly or indirectly, in DDI, or DDI no longer holds an interest, directly or indirectly, in DDI-US. In such event, the agreement provides that the parties will mutually renegotiate the terms of the agreement. We expect, but cannot guarantee, that we will be able to continue to receive those rights on favorable or reasonable terms. See “Item 4B. Business overview—Intellectual property.”

The future success of our business will depend, in part, on our ability to retain or expand intellectual property licenses. We cannot assure that these third-party licenses will continue to be available to us on commercially reasonable terms, if at all. Further, existing and future license arrangements containing royalty provisions could cause us to incur impairment charges in connection with minimum guarantees. To address these

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risks, we have increased our research and development capabilities in order to create proprietary intellectual property, including content, although there is no guarantee we will be able to create content that receives sufficient acceptance from the market or that is developed in a timely manner. In the event that we are unable to create such content and, in addition, if we lose the benefit of, or cannot renew and/or expand existing licenses with IGT and DUG, we may be required to discontinue or limit our use of certain game titles and related technologies that include or incorporate the licensed intellectual property.

Our business depends on the protection of our proprietary information and our owned and licensed intellectual property.

We believe that our success depends in part on protecting our owned and licensed intellectual property in the United States and other countries. Our intellectual property includes certain patents, trademarks and copyrights relating to our games, and proprietary or confidential information that is not subject to formal intellectual property protection. Much of our intellectual property that is significant to our business is owned by DoubleU Games or IGT and licensed to us, and we do not control the protection and maintenance of such intellectual property from third parties, and must rely on them to protect and maintain such intellectual property. Our success may depend, in part, on our and our licensors' ability to protect the trademarks, trade dress, names, logos, or symbols under which we market our games and to obtain and maintain patent, copyright, and other intellectual property protection for the technologies, designs, software, and innovations used in our games and our business. We cannot assure that we will be able to build and maintain consumer value in our proprietary trademarks and copyrights or otherwise protect our technologies, designs, software, and innovations or that any patent, trademark, copyright, or other intellectual property right will provide us with competitive advantages.

We also rely on trade secrets and proprietary knowledge. We enter into confidentiality agreements with our employees and independent contractors regarding our trade secrets and proprietary information, but we cannot assure that the obligation to maintain the confidentiality of our trade secrets and proprietary information will be honored by such individuals.

In the future we may make claims of infringement against third parties or make claims that third-party intellectual property rights are invalid or unenforceable. These claims could cause us to incur greater costs and expenses in the protection of our intellectual property and could potentially negatively impact our intellectual property rights, for example, by causing one or more of our intellectual property rights to be ruled or rendered unenforceable or invalid.

Despite our efforts to protect our intellectual property rights, the steps we take in this regard might not be adequate to prevent or deter infringement or other misappropriation of our intellectual property by competitors or other third parties.

The intellectual property rights of others may prevent us from developing new games and/or entering new markets, or may expose us to liability or costly litigation.

Our success depends in part on our ability to continually adapt our games to incorporate new technologies as well as intellectual property related to game mechanics and procedures, and to expand into markets that may be created by these new developments. If technologies are protected by the intellectual property rights of our competitors or other third parties, we may be prevented from introducing games based on these technologies or expanding into markets created by these technologies.

We cannot assure that our business activities and games will not infringe upon the proprietary rights of others, or that other parties will not assert infringement claims against us. A successful claim of infringement by a third party against us, our games or one of our licensees in connection with the use of our technologies, game mechanics or procedures, or an unsuccessful claim of infringement made by us against a third party or its products or games, could adversely affect our business or cause us financial harm. Any such claim and any resulting litigation, should it occur, could:

- be expensive and time-consuming to defend or require us to pay significant amounts in damages;

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- result in invalidation of our proprietary rights or render our proprietary rights unenforceable;
- cause us to cease making, licensing, or using games that incorporate the intellectual property;
- require us to redesign, reengineer, or rebrand our games or limit our ability to bring new games to the market in the future;
- require us to enter into costly or burdensome royalty, licensing, or settlement agreements in order to obtain the right to use a product or process;
- impact the commercial viability of the games that are the subject of the claim during the pendency of such claim; or
- require us to stop offering the infringing games.

Our success depends upon our ability to acquire and retain players, as well as adapt to and offer games that keep pace with changing technology and evolving industry standards.

Our ability to acquire and retain players is largely driven by our success in maintaining and increasing the quantity and quality of games in our portfolio. To satisfy players, we need to continue to improve their online gaming experience and innovate and introduce games that our players find more rewarding to play than those of our competitors. This will require us to, among other things, continue to improve our technology, game mechanics, and procedures to optimize search results for our games, tailor our game offerings to additional geographic and demographic market segments, and improve the user-friendliness of our games, while working to minimize the risk that players will be diverted from our existing games to one of our new games resulting in reduced purchases by those players. Our ability to anticipate or respond to changing technology and evolving industry standards and to develop and introduce new and enhanced games on a timely basis, or at all, is a significant factor affecting our ability to remain competitive and expand and attract new players. We cannot assure that we will have the financial and technical resources needed to introduce new games on a timely basis, or at all.

Further, as technological or regulatory standards change and we modify our games to comply with those standards, we may need players to take certain actions to continue playing, such as downloading a new game, performing age-gating checks or accepting new terms and conditions. Players may stop using our games at any time, including if the quality of the player experience on our games and our support capabilities in the event of a problem do not meet their expectations or keep pace with the quality of the player experience generally offered by competitive games and services.

Our players depend on our support organization to resolve any issues relating to our games. Our ability to provide effective support is largely dependent on our ability to attract, resource, and retain employees who are not only qualified to support players of our games, but are also well versed in our games. Any failure to maintain high-quality support, or a market perception that we do not maintain high-quality support, could harm our reputation, adversely affect our ability to sell virtual chips within our games to existing and prospective players, and adversely impact our results of operations, cash flows, and financial condition.

Our global operations expose us to business and legal risks, which could restrict or limit our ability to execute our strategy.

Substantially all of our revenues are currently generated through DDI-US in the United States. Our headquarters and significant game development operations are based in Seoul, Korea. We are subject to risks customarily associated with such global operations, including: the complexity of laws, regulations, and markets in the countries in which we operate; the uncertainty of enforcement of remedies in certain jurisdictions; the effect of currency exchange rate fluctuations; export control laws; the impact of foreign labor laws and disputes; the ability to attract and retain key personnel; the economic, tax, and regulatory policies of local governments;

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compliance with applicable anti-money laundering, anti-bribery, and anti-corruption laws, including the Foreign Corrupt Practices Act, The Improper Solicitation and Graft Act of Korea, and other anti-corruption laws that generally prohibit persons and companies and their agents from offering, promising, authorizing, or making improper payments to foreign government officials for the purpose of obtaining or retaining business; and compliance with applicable sanctions regimes regarding dealings with certain persons or countries. Certain of these laws also contain provisions that require accurate recordkeeping and further require companies to devise and maintain an adequate system of internal accounting controls.

If we adopt policies and controls that are ineffective or an employee or intermediary fails to comply with the applicable regulations, we may be subject to criminal and civil sanctions and other penalties. Any such violation could disrupt our business and adversely affect our reputation, results of operations, cash flows, and financial condition. In addition, our business operations could be interrupted and negatively affected by terrorist activity, political unrest, or other economic or political uncertainties. Moreover, countries, including in particular Korea and the United States, could impose tariffs, quotas, trade barriers, and other similar restrictions that adversely impact the international nature of our business.

Further, our ability to expand successfully in other countries involves other risks, including difficulties in integrating local operations, risks associated with entering jurisdictions in which we may have little experience and the day-to-day management of a growing and increasingly geographically diverse company. We may not realize the operating efficiencies, competitive advantages or financial results that we anticipate from our investments in countries other than Korea and the United States.

Data privacy and security laws and regulations in the jurisdictions in which we do business could increase the cost of our operations and subject us to possible sanctions and other penalties.

We collect, process, store, use, and share data, some of which contains limited personal information. Consequently, our business is subject to a number of U.S. and international laws and regulations governing data privacy and security, including with respect to the collection, storage, use, transmission, sharing, and protection of personal information. Data privacy protection laws are rapidly changing and likely will continue to do so for the foreseeable future and may be inconsistent from jurisdiction to jurisdiction.

We are subject to U.S. federal and state and foreign laws related to the privacy and protection of player data. Such regulations such as the General Data Protections Regulation (“GDPR”) from the European Union (“EU”), the United Kingdom’s Data Protection Act of 2018, the UK GDPR, and the California Consumer Privacy Act are new, untested laws and regulations that could affect our business, and the potential impact is unknown. See “Item 4B. Business overview—Regulation of the industry.” We are also subject to evolving laws and regulations that dictate under what circumstances we can transfer, process and/or receive certain data that is critical to our operations, including data shared between countries or regions in which we operate. For example, in July 2020, the European Union-U.S. Privacy Shield was invalidated by the Court of Justice of the European Union (“CJEU”). Other bases to legitimize the transfer of such data, such as Standard Contractual Clauses (“SCCs”), have been subjected to regulatory and judicial scrutiny. If one or more of the legal bases for transferring data from Europe to the United States is invalidated or the transfer frameworks are amended, if we are unable to transfer data between and among countries and regions in which we operate, or if we are restricted from sharing data among our products and services, it could affect the manner in which we operate and require us to change our data processing policies and measures, which may be burdensome and difficult to undertake successfully, and could adversely affect our financial results.

There currently are a number of other proposals related to data privacy and security pending before several legislative and regulatory bodies. For example, the European Union is contemplating the adoption of the Regulation on Privacy and Electronic Communications (the “e-Privacy Regulation”). While this regulation was planned to take effect simultaneously with GDPR, it is currently still being debated and discussed by the EU member states. The e-Privacy Regulation focuses on the privacy of electronic communications and, in that

respect, it contains new rules for direct marketing activities. It is highly likely that these rules will lead to new consent requirements.

Due to the rapidly changing nature of these data privacy protection laws, there is not always clear guidance from the respective governments and regulators regarding the interpretation of the law, which may create the risk of an inadvertent violation. Efforts to comply with these and other data privacy and security restrictions that may be enacted could require us to modify our data processing practices and policies, incorporate privacy by design into our games, and will significantly increase the cost of our operations. Failure to comply with such restrictions could subject us to criminal and civil sanctions and other penalties. In part due to the uncertainty of the legal climate, complying with regulations, and any applicable rules or guidance from self-regulatory organizations relating to privacy, data protection, information security, and consumer protection, may result in substantial costs and may necessitate changes to our business practices, which may compromise our growth strategy, adversely affect our ability to attract or retain players, and otherwise adversely affect our business, financial condition, and operating results.

Any failure or perceived failure by us to comply with our posted privacy policies or terms of use, our privacy-related obligations to players or other third parties, or any other legal obligations or regulatory requirements relating to privacy, data protection, or information security may result in governmental investigations or enforcement actions, litigation, claims, or public statements against us by consumer advocacy groups or others, and could result in significant liability, cause our players to lose trust in us, and otherwise materially and adversely affect our reputation and business. Furthermore, the costs of compliance with, and other burdens imposed by, the laws, regulations, and policies that are applicable to us may limit the adoption and use of, and reduce the overall demand for, our games.

Additionally, if third parties we work with violate applicable laws, regulations, or agreements, such violations may put our players' data at risk, or result in governmental investigations or enforcement actions, fines, litigation, claims, or public statements against us by consumer advocacy groups or others, and could result in significant liability, cause our players to lose trust in us, and otherwise materially and adversely affect our reputation and business. Further, public scrutiny of, or complaints about, technology companies or their data handling or data protection practices, even if unrelated to our business, industry, or operations, may lead to increased scrutiny of technology companies, including us, and may cause government agencies to enact additional regulatory requirements or to modify their enforcement or investigation activities, which may increase our costs and risks.

Security breaches or other disruptions could compromise our information or the information of our players. If we sustain cyber-attacks or other security incidents that result in data breaches, we could suffer a loss of players and associated revenue, increased costs, exposure to significant liability, reputational harm, and other negative consequences.

Our business sometimes involves the storage, processing, and transmission of certain proprietary, confidential, and personal information of our players. We also maintain certain other proprietary and confidential information relating to our business and personal information of our personnel. Despite our security measures, our information technology may be subject to cyber-attacks, viruses, malicious software, break-ins, theft, computer hacking, employee error or malfeasance, or other security breaches. Hackers and data thieves are increasingly sophisticated and operate large-scale and complex automated attacks. Experienced computer programmers and hackers may be able to penetrate our security controls and misappropriate or compromise sensitive personal, proprietary, or confidential information, create system disruptions, or cause shutdowns. They also may be able to develop and deploy malicious software programs that attack our systems or otherwise exploit any security vulnerabilities.

Our systems and the data stored on those systems may also be vulnerable to security incidents or security attacks, acts of vandalism or theft, coordinated attacks by activist entities, misplaced or lost data, human errors, or other similar events that could negatively affect our systems, the data stored on those systems, and the

data of our business partners. Further, third parties, such as hosted solution providers, that provide services to us, could also be a source of security risks in the event of a failure of their own security systems and infrastructure. An increasing number of online services have disclosed security breaches, some of which have involved sophisticated and highly targeted attacks on portions of their services. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and often are not foreseeable or recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any security breach or incident that we experience could result in unauthorized access to, misuse of, or unauthorized acquisition of our or our players' data, the loss, corruption or alteration of this data, interruptions in our operations, or damage to our computers or systems or those of our players or third-party platforms. Any of these could expose us to claims, litigation, fines, and potential liability.

The costs to eliminate or address the foregoing security threats and vulnerabilities before or after a cyber incident could be significant. Our remediation efforts may not be successful and could result in interruptions, delays or cessation of service, and loss of existing or potential suppliers or players. As threats related to cyber-attacks develop and grow, we may also find it necessary to make further investments to protect our data and infrastructure, which may impact our operations. Although we have insurance coverage for protecting against cyber-attacks, it may not be sufficient to cover all possible claims, and we may suffer losses that could have a material adverse effect on our business. We could also be negatively impacted by existing and proposed laws and regulations, and government policies and practices related to cybersecurity, data privacy, data localization, and data protection in the United States, Korea, the European Union, and other countries.

If an actual or perceived breach of our security occurs, public perception of the effectiveness of our security measures for our games and content could be harmed, and we could lose players. Data security breaches and other data security incidents may also result from non-technical means, for example, actions by employees or contractors. Any compromise of our security could result in a violation of applicable privacy and other laws, regulatory or other governmental investigations, enforcement actions, and legal and financial exposure, including potential contractual liability that is not always limited to the amounts covered by our insurance. Any such compromise could also result in damage to our reputation and a loss of confidence in our security measures. Any of these effects could have a material adverse impact on our results of operations, cash flows, and financial condition.

Our business depends on our ability to collect and use data to deliver relevant content and advertisements, and any limitation on the collection and use of this data could cause us to lose revenues.

When our players use our games, we may process, store, use, and share data about our players, some of which contains limited personal information. We use some of this data to provide a better experience for the player by delivering relevant content and advertisements. Our players may decide not to allow us to collect some or all of this data or may limit our use of this data. Any limitation on our ability to collect data about players and game interactions would likely make it more difficult for us to deliver targeted content and advertisements to our players. Interruptions, failures or defects in our data collection, mining, analysis and storage systems, as well as privacy concerns and regulatory restrictions regarding the collection of data, could also limit our ability to aggregate and analyze player data. If that happens, we may not be able to successfully adapt to player preferences to improve and enhance our games, retain existing players and maintain the popularity of our games, which could cause our business, financial condition, or results of operations to suffer.

Additionally, Internet-connected devices and operating systems controlled by third parties increasingly contain features that allow device users to disable functionality that allows for the delivery of advertising on their devices, including through Apple's Identifier for Advertising, or IDFA, or Google's Advertising ID, or AAID, for Android devices. Device and browser manufacturers may include or expand these features as part of their standard device specifications. For example, when Apple announced that UDID, a standard device identifier used in some applications, was being superseded and would no longer be supported, application developers were required to update their apps to utilize alternative device identifiers such as universally unique identifier, or, more

recently, IDFA, which simplifies the process for Apple users to opt out of behavioral targeting. If players elect to utilize the opt-out mechanisms in greater numbers, our ability to deliver effective advertisements would suffer, which could adversely affect our revenues from in-game advertising.

We are subject to certain risks as an environmental, social and governance driven company.

We believe that a contributor to our success has been our commitment to environmental, social and governance based values, and we strive to operate our gaming business in a socially responsible manner. Internally, attracting, developing, and retaining top talent in an environment that promotes employee well-being, safety, development, diversity and inclusion is a part of our long-term strategy. However, we may be affected by negative reports or publicity if we fail, or are perceived to have failed, to live up to these values. For example, providing a safe and responsible online gaming environment for users is central to our operations. As a result, our brands and reputation may be negatively affected by the actions of users that are deemed to be irresponsible while using our apps. Similarly, any negative publicity about activity in the business that is perceived to be contrary to our human capital management policies would negatively affect our brands and reputation.

In addition, we may make decisions regarding our business and games in accordance with our values that may negatively impact our short- or medium-term operating results if we believe those decisions are consistent with such values and will improve the aggregate user experience or promotes employee well-being, safety, development, diversity and inclusion. Although we expect that our commitment to environmental, social and governance based values will, accordingly, improve our financial performance over the long term, these decisions may not be consistent with the expectations of investors and any longer-term benefits may not materialize within the time frame we expect or at all, which could harm our business, revenue and financial results.

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

The number of people using mobile devices has increased significantly over time and we expect that this trend will continue. However, the mobile market, particularly the market for mobile games, may not grow in the way we anticipate. Approximately 73% of our revenue for the year ended December 31, 2021 and 72% for the year ended December 31, 2020 were attributable to mobile device use. If the mobile devices on which our games are available decline in popularity or become obsolete faster than anticipated, we could experience a decline in revenue and may not achieve the anticipated return on our development efforts. Any such decline in the growth of the mobile market or in the use of mobile devices for games could harm our business, financial condition, or results of operations.

We operate in a highly competitive industry, and our success depends on our ability to effectively compete.

Online gaming is a rapidly evolving industry with low barriers to entry. Businesses can easily launch online or mobile platforms and applications at nominal cost by using commercially available software or partnering with various established companies in these markets, but may not offer the same level of sophistication or capabilities as our games. The market for our games is also characterized by rapid technological developments, frequent launches of new games and content, changes in player needs and behavior, disruption by innovative entrants, and evolving business models and industry standards. As a result, our industry is constantly changing games and business models in order to adopt and optimize new technologies, increase cost efficiency, and adapt to player preferences.

We face competition for leisure time and discretionary spending of our players. Other forms of leisure activities, such as offline, traditional online, personal computer and console games, television, movies, sports, and the internet, offer much larger and more well-established options for consumers. Consumer tastes and preferences for leisure activities are also subject to sudden or unpredictable change due to new innovations. If

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consumers do not find our games to be compelling or if other existing or new leisure activities are perceived by our players to offer greater variety, affordability, interactivity, and overall enjoyment, our business could be materially and adversely affected.

We also compete with online gaming companies, including those that offer social casino games such as Playtika, Zynga, SciPlay, Aristocrat, and others, and some of these companies have a base of existing players that is larger than ours. In addition, our controlling shareholder, DoubleU Games, also creates and markets online games and represents a potential source of competition for talent, content development, and players. The interests of DoubleU Games may, from time to time, conflict or compete with our interests. Some of our current and potential competitors, including DoubleU Games, enjoy substantial competitive advantages, such as greater financial, technical, and other resources and, in some cases, the ability to rapidly combine online platforms with traditional staffing solutions. These companies may use these advantages to develop different platforms and services to compete with our games, spend more on advertising and marketing, invest more in research and development or respond more quickly and effectively than we do to new or changing opportunities, technologies, standards, regulatory conditions, or player preferences or requirements. If we are not able to respond to and manage competitive pressure on our business effectively, it could adversely impact our results of operations, cash flows, and financial condition.

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

We believe that establishing and maintaining our awareness of our games is critical to developing and maintaining favorable relationships with players, platform providers, advertisers, and content licensors, as well as competing for key management and technical talent. Increasing awareness and recognition of our games is particularly important in connection with our strategic focus on developing games based on our own intellectual property and successfully cross-promoting our games. In addition, globalizing and extending awareness and recognition of our games require significant investment and extensive management time to execute successfully. Although we make significant sales and marketing expenditures in connection with the launch of our games, these efforts may not succeed in increasing awareness of our existing or new games. In addition, if a game contains objectionable content or the messaging functionality of our games is abused, our reputation could be damaged. Despite reasonable precautions, some consumers may be offended by certain of our game content or by treatment of other players. If consumers believe that a game we published contains objectionable content, consumers could refuse to play it and could pressure the platform providers to remove the game from their platforms. Further, if we fail to increase and maintain awareness and consumer recognition of our games, our potential revenues could be limited, our costs could increase, and our business, financial condition, results of operations, or reputation could suffer.

Our applications enable us to track certain performance metrics with internal and third-party tools and we do not independently verify such metrics. Certain of our performance metrics are subject to inherent challenges in measurement, and real or perceived inaccuracies in such metrics may harm our reputation and adversely affect our business.

We track certain performance metrics, including the number of active and paying players of our games. Our all-in-one app strategy, in particular, provides us with large amounts of data on users and participation rates, among other things. Our performance metrics tools have a number of limitations and our methodologies for tracking these metrics may change over time, which could result in unexpected changes to our metrics, including the metrics we report. If the internal or third-party tools we use to track these metrics undercount or overcount performance or contain algorithm or other technical errors, the data we report may not be accurate. In addition, limitations or errors with respect to how we measure data (or the data that we measure) may affect our understanding of certain details of our business, which could affect our longer-term strategies.

Furthermore, our performance metrics may be perceived as unreliable or inaccurate by players, analysts, or business partners. If our performance metrics are not accurate representations of our business, player base, or traffic levels, if we discover material inaccuracies in our metrics, or if the metrics do not provide an accurate measurement of our business, our reputation may be harmed and our business, prospects, financial condition, and results of operations could be materially and adversely affected.

We rely on information technology and other systems, and any failures in our systems or errors, defects, or disruptions in our games could diminish our reputation, subject us to liability, disrupt our business, and adversely impact our results.

We rely on information technology systems that are important to the operation of our business, some of which are managed by third parties. These third parties are typically under no obligation to renew agreements and there is no guarantee that we will be able to renew these agreements on commercially reasonable terms, or at all. These systems are used to process, transmit, and store electronic information, to manage and support our business operations, and to maintain internal control over our financial reporting. In addition, we collect and store certain data, including proprietary business information, and may have access to confidential or personal information in certain of our businesses that is subject to privacy and security laws, and regulations. We could encounter difficulties in developing new systems, maintaining and upgrading current systems, and preventing security breaches. Among other things, our systems are susceptible to damage, outages, disruptions, or shutdowns due to fire, floods, power loss, break-ins, cyber-attacks, network penetration, denial of service attacks, and similar events. Any failures in our computer systems or telecommunications services could affect our ability to operate our games or otherwise conduct business.

Portions of our information technology infrastructure, including those operated by third parties, may experience interruptions, delays or cessations of service or produce errors in connection with systems integration or migration work that takes place from time to time. We may not be successful in implementing new systems and transitioning data, which could cause business disruptions and be more expensive, time-consuming, disruptive, and resource-intensive. We have no control over third parties that provide services to us and those parties could suffer problems or make decisions adverse to our business. We have contingency plans in place to prevent or mitigate the impact of these events. However, such disruptions could materially and adversely impact our ability to deliver games to players and interrupt other processes. If our information systems do not allow us to transmit accurate information, even for a short period of time, to key decision-makers, the ability to manage our business could be disrupted and our results of operations, cash flows, and financial condition could be materially and adversely affected. Failure to properly or adequately address these issues could impact our ability to perform necessary business operations, which could materially and adversely affect our reputation, competitive position, results of operations, cash flows, and financial condition.

Substantially all of our games rely on data transferred over the internet, including wireless internet. Access to the internet in a timely fashion is necessary to provide a satisfactory player experience to the players of our games. Third parties, such as telecommunications companies, could prevent access to the internet or limit the speed of our data transmissions, with or without reason, causing an adverse impact on our player experience that may materially and adversely affect our reputation, competitive position, results of operations, cash flows, and financial condition. In addition, telecommunications companies may implement certain measures, such as increased cost or restrictions based on the type or amount of data transmitted, that would impact consumers' ability to access our games, which could materially and adversely affect our reputation, competitive position, results of operations, cash flows, and financial condition. Furthermore, internet penetration may be adversely affected by difficult global economic conditions or the cancellation of government programs to expand broadband access.

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Our games and other software applications and systems, and the third-party platforms upon which they are made available, could contain undetected errors.

Our games and other software applications and systems, as well as the third-party platforms upon which they are made available, could contain undetected errors, bugs, flaws, corrupted data, defects, and other vulnerabilities that could adversely affect the performance of our games. For example, these errors could prevent the player from making in-app purchases of virtual chips, which could harm our operating results. They could also harm the overall game-playing experience for our players, which could cause players to reduce their playing time or in game purchases, discontinue playing our games altogether, or not recommend our games to other players. Such errors could also result in our games being non-compliant with applicable laws or create legal liability for us.

Some of these errors may only become apparent after a game is launched, particularly as we often launch new content and release new features to existing games under tight time constraints. Any such errors may be exploited by cheating programs and other forms of misappropriation, disrupt our operations, adversely affect the gaming experience of our players, harm our reputation, cause our players to stop playing our games, divert our resources, and delay market acceptance of our games, any of which could result in legal liability to us or harm our business, financial condition, or results of operations.

We may use open source software in a manner that could be harmful to our business.

We use open source software in connection with our technology and games on a limited basis. The original developers of the open source code provide no warranties on such code. Moreover, some open source software licenses require players who distribute open source software as part of their proprietary software to publicly disclose all or part of the source code to such software and/or make available any derivative works of the open source code on unfavorable terms or at no cost. We try to use open source software in a manner that will not require the disclosure of the source code to our proprietary software or prevent us from charging fees to our players for use of our proprietary software. However, we cannot guarantee that these efforts will be successful, and thus, there is a risk that the use of such open source code may ultimately preclude us from charging fees for the use of certain software, require us to replace certain code used in our games, pay a royalty to use some open source code, make the source code of our games publicly available, or discontinue certain games. Our results of operations, cash flows, and financial condition could be adversely affected by any of the above requirements.

Our inability to complete potential acquisition opportunities and integrate those businesses successfully could limit our growth or disrupt our plans and operations.

In the future, we may pursue additional strategic acquisitions to further expand our operations. Our ability to succeed in implementing our strategy will depend to some degree upon our ability to identify and complete commercially viable acquisitions. We cannot assure that acquisition opportunities will be available on acceptable terms, or at all, or that we will be able to obtain necessary financing or regulatory approvals to complete potential acquisitions.

We may not be able to successfully integrate any businesses that we acquire or do so within the intended timeframes. We could face significant challenges in managing and integrating our acquisitions and our combined operations, including acquired assets, operations, and personnel. In addition, the expected cost synergies associated with such acquisitions may not be fully realized in the anticipated amounts or within the contemplated timeframes or cost expectations, which could result in increased costs and have an adverse effect on our prospects, results of operations, cash flows, and financial condition.

Our business may be adversely impacted by reductions in discretionary consumer spending as a result of downturns in the economy, global pandemics, or other factors beyond our control.

Consumer demand for entertainment and social casino games, such as ours, is sensitive to downturns in the economy and the corresponding impact on discretionary spending on leisure activities. Changes in

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discretionary consumer spending or consumer preferences brought about by factors such as perceived or actual general economic conditions, effects of declines in consumer confidence in the economy, public health concerns or pandemics, such as the COVID-19 coronavirus, the impact of high energy and food costs, the increased cost of travel, decreased disposable consumer income and wealth, political and regulatory uncertainty, or fears of war and future acts of terrorism could further reduce customer demand for the games that we offer and the amounts, if any, our players are willing to spend. These factors could impose practical limits on pricing and negatively impact our results of operations and financial condition.

With respect to COVID-19, we have followed guidance by the Korean government and the state government in Washington to protect our employees and our operations during the pandemic and have effectively implemented a remote environment for our business. To date, we have not incurred any interruptions in operations. We continuously monitor performance and other industry reports to assess the risk of future negative impacts should the disruption of the economy progress.

The online gaming industry, in particular, has been identified in industry and media reports, such as *Eilers & Krejcik* and *AppsFlyer*, as an unintended beneficiary of this pandemic as people are quarantined in their homes, and we are not an exception to this benefit. Our monthly revenue benefited from the effects of the pandemic, particularly in those months when stay-at-home orders and quarantines were broadly imposed across the United States. However, we expect such benefit to decrease as vaccinations become more widely available and restrictions are eased. Consequently, any change resulting in a diversion of player discretionary income to other uses, including for essential items, could adversely impact our cash flows, operating results, and financial condition. See “Item 5. Operating and financial review and prospects—Recent developments.”

We rely on skilled employees with creative and technical backgrounds.

We rely on our highly skilled, technically trained, and creative employees to develop new technologies and create innovative games. Such employees, particularly game designers, engineers, and project managers with desirable skill sets are in high demand, and we devote significant resources to identifying, hiring, training, successfully integrating, and retaining these individuals. A lack of skilled technical workers could delay or negatively impact our business plans, ability to compete, results of operations, cash flows, and financial condition.

Our results of operations, cash flows, and financial condition could be affected by natural events in the locations in which we or our key platform providers or content suppliers operate.

We may be impacted by severe weather and other geological events, including hurricanes, earthquakes, floods or tsunamis that could disrupt our operations or the operations of our key platform providers or content suppliers. Natural disasters or other disruptions at any of our facilities, those of our key providers, such as Apple, Google, Facebook, and Amazon, or those of our content suppliers, may impair the operation, development or provision of our games. While we insure against certain business interruption risks, we cannot assure that such insurance will compensate us for any losses incurred as a result of natural or other disasters. Any serious disruption to our operations, or those of our key providers or suppliers could have a material adverse effect on our results of operations, cash flows, and financial condition.

Our results of operations fluctuate due to seasonality and other factors and, therefore, our periodic operating results are not guarantees of future performance.

Our results of operations can fluctuate due to seasonal trends and other factors. Player activity is generally slower in the second and third quarters of the year, particularly during the summer months. Certain other seasonal trends and factors that may cause our results to fluctuate include:

- holiday and vacation seasons;

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- climate and weather conditions that could cause players to pursue other activities;
- economic and political conditions; and
- the timing of the release of new games or refreshed content, including those of our competitors.

Consequently, results for any quarter are not necessarily indicative of the results that may be achieved in another quarter or for the full fiscal year. We cannot assure that the seasonal trends and other factors that have impacted our historical results will repeat in future periods as we do not have the ability to influence these factors.

We are subject to a variety of laws worldwide, many of which are still untested and still developing and which could subject us to further extensive governmental regulation, claims, or otherwise, as well as federal, state, and local laws affecting business in general, which may harm or restrict our business.

We are subject to a variety of laws in the United States, Korea, and other jurisdictions, including laws regarding consumer protection, intellectual property, virtual items and currency, export, and national security, all of which are continuously evolving and developing. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly laws outside of Korea and the United States. It is also likely that as our business grows and evolves and our games are played in larger volume in a greater number of countries, we will become subject to laws and regulations in additional jurisdictions. If we are not able to comply with these laws or regulations or if we become liable under these laws or regulations, we could be directly harmed, and we may be forced to implement new measures to reduce our exposure to this liability. This may require us to expend substantial resources, modify our games, or block users from a particular jurisdiction, each of which would harm our business, financial condition, and results of operations. In addition, the increased attention focused upon liability issues as a result of lawsuits and legislative proposals could harm our reputation or otherwise impact the growth of our business. Any costs incurred as a result of this potential liability could harm our business and operating results.

It is possible that a number of laws and regulations may be adopted or construed to apply to us in the United States, Korea, and elsewhere that could restrict the online and mobile industries, including player privacy, advertising, taxation, gaming, copyright, distribution, and antitrust. Our ability to access potentially key markets in the future, such as Korea and China, which currently restrict or otherwise limit entry for social casino gaming companies, will be dependent in part upon changes to the current legal and regulatory environment.

Furthermore, the growth and development of electronic commerce, social gaming, and virtual items and currency may lead to more stringent consumer protection laws that may impose additional burdens on or limitations on operations of companies such as ours conducting business through the internet and mobile devices. If scrutiny and regulation of our industry increases, we will be required to devote additional legal and other resources to addressing such regulation. Such new compliance costs or jurisdictional restrictions on our ability to offer online games could have a material adverse effect on our business, financial condition, and operating results. See “Item 4B. Business overview—Regulation of the industry.”

Changes in tax laws or tax rulings, or the examination of our tax positions, could materially affect our financial condition and results of operations.

Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. In 2017, the United States enacted comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others: (i) a permanent reduction to the corporate income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base), and (iv) a one-time tax on accumulated offshore earnings held in cash and cash equivalents and illiquid assets, with the latter taxed at a

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lower rate. Because these tax law changes are relatively new, we are still evaluating the impact that they may have on our business and results of operations in the future. Although at this time we do not expect that the changes will have an overall significant adverse impact on our business and financial condition, we cannot assure you that our business and results of operations will not be adversely affected by these or other changes to tax laws.

Our existing corporate structure and intercompany arrangements have been implemented in a manner we believe is in compliance with current prevailing tax laws and related regulatory guidance. However, the tax benefits that we intend to eventually derive could be undermined due to changing tax laws. In addition, the taxing authorities in Korea and the United States regularly examine income and other tax returns and we expect that they may examine our income and other tax returns. The ultimate outcome of these examinations cannot be predicted with certainty.

There can be no assurance that we will not be classified as a passive foreign investment company, which could result in adverse U.S. federal income tax consequences to United States Holders of ADSs.

A non-U.S. corporation is classified as a passive foreign investment company (“PFIC”) for any taxable year in which, after applying relevant look-through rules with respect to the income and assets of its subsidiaries, either: (i) 50% or more of the value of the corporation’s assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets; or (ii) at least 75% of the corporation’s gross income is passive income. For purposes of the asset test, any cash and cash equivalents (such as bank deposits) will count as passive assets, and goodwill should be treated as an active asset to the extent that it is associated with activities that produce or are intended to produce active income. “Passive income” generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions.

Based upon our current and projected income and assets and the valuation of our assets, including goodwill, we do not expect to be a PFIC for our current taxable year or the foreseeable future. However, the determination of whether any corporation was, or will be, a PFIC for a taxable year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, because the determination of whether a corporation will be a PFIC for any taxable year can only be made after the close of such taxable year, there can be no assurance that we will not be a PFIC for our current taxable year or any future taxable year.

If we are a PFIC for any year during which you hold the common shares or ADSs, then U.S. investors could be subject to adverse U.S. federal income tax consequences (regardless of whether we continue to be a PFIC), including increased tax liability on disposition gains and certain “excess distributions” and additional reporting requirements. U.S. investors should consult their tax advisers regarding our PFIC status for any taxable year and the potential application of the PFIC rules to an investment in our common shares or ADSs, including the availability and the advisability of making certain elections under the PFIC rules.

We may be subject to additional tax liabilities in connection with our operations or due to future legislation, which may include a “global minimum tax,” each of which could materially impact our financial position and results of operation.

We are subject to federal and state income, sales, use, value added, and other taxes in Korea, the United States and other countries in which we conduct business and such laws and rates vary by jurisdictions. In recent years, non-U.S. jurisdictions have imposed or proposed digital services taxes, including in connection with the Organisation for Economic Co-Operation and Development’s (OECD) Base Erosion and Profit Shifting (BEPS) Project. In addition, there is growing international support for a so-called “global minimum tax” applicable to

certain companies that, if enacted, could apply to us. These taxes, whether imposed unilaterally by non-U.S. jurisdictions or in response to multilateral measures (e.g., the BEPS Project), could result in taxation of companies that have customers in a particular jurisdiction but do not operate there through a permanent establishment. Changes to tax law or administration such as these, whether at the state level or the international level, could increase our tax administrative costs and tax risk, and negatively affect our overall business, results of operations, financial condition and cash flows. We are currently unable to predict whether such changes will occur and, if so, the ultimate impact on our business.

Our insurance may not provide adequate levels of coverage against claims.

We believe that we maintain insurance customary for businesses of our size and type. However, there are types of losses we may incur that cannot be insured against or that we believe are not economically reasonable to insure. Moreover, any loss incurred could exceed policy limits and policy payments made to us may not be made on a timely basis. Such losses could adversely affect our business prospects, results of operations, cash flows and financial condition.

Risks related to doing business in Korea

Escalations in tensions with North Korea could have a material adverse effect on our business, prospects, financial condition, and results of operations.

We are incorporated in Korea and certain of our operations are located in Korea. As a result, we are subject to geopolitical uncertainties and risks involving Korea and North Korea.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated over the years and may increase or change abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapons and ballistic missile programs as well as its hostile military actions against Korea. For example, North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and has conducted several rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs, which are more powerful than plutonium bombs, and warheads that can be mounted on ballistic missiles. Over the years, North Korea has also conducted a series of ballistic missile tests, including missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Korean government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Korean government also closed the inter-Korea Gaesong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in December 2017 in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.

North Korea's economy also faces severe challenges, which may further aggravate social and political pressures within North Korea. In recent years, a series of bilateral summit meetings were held between Korea and North Korea in April, May, and September 2018 and between the United States and North Korea in June 2018 and February and June 2019. The United States-North Korea meeting in February 2019 ended abruptly and without an agreement after the United States refused to lift sanctions until North Korea relinquished all of its nuclear weapons. In June 2019, the United States and North Korea had another one-day summit at the Korean Demilitarized Zone, following which both sides announced a resumption of denuclearization talks. However, North Korea has since resumed its missile testing, heightening tensions, and the outlook of such discussions remains uncertain.

Further tensions in North Korean relations may develop due to events such as North Korea's leadership crisis, breakdown in high-level inter-Korea contacts, or any military hostilities. Alternatively, tensions may be

resolved through reconciliatory efforts, which include peace talks, alleviation of sanctions, or reunification. There can be no assurance that future negotiations will result in a final agreement on North Korea's nuclear program, including critical details such as implementation and timing, or that the level of tensions between Korea and North Korea will not escalate. Any increase in tensions, an outbreak in military hostilities or other actions or occurrences, could have a material adverse effect on the Korean economy and on our business, prospects, financial condition, and results of operations.

It may not be possible for investors to enforce U.S. judgments against us.

Our headquarters facility is located in Seoul, Korea. In addition, two of our directors are non-residents of the United States, and all or a substantial portion of the assets of these non-residents are located outside the United States. As a result, it may be difficult for U.S. investors to serve process within the United States upon us (other than our subsidiaries) or our directors and officers or to enforce a judgment against us for civil liabilities in U.S. courts. In addition, you should not assume that courts in Korea (i) would enforce judgments of U.S. courts obtained in actions against us or our subsidiaries based upon the civil liability provisions of applicable U.S. federal and state securities laws or (ii) would enforce, in original actions, liabilities against us or our subsidiaries based on those laws.

Risks related to our relationship with DoubleU Games

As a foreign private issuer, we intend to follow “home country” practice even though we may be considered a “controlled company” under NASDAQ corporate governance rules since DoubleU Games is our majority shareholder and has voting control over key decisions affecting our Company and our shareholders.

As of April 1, 2022, DoubleU Games holds approximately 67.1% of our shares. We have not entered into any voting agreement with DoubleU Games with respect to its voting of our shares in the future. Consequently, DoubleU Games, as our major shareholder, is able to exercise voting control over most decisions upon which shareholders are entitled to vote.

As a result, we are a “controlled company” within the meaning of the NASDAQ corporate governance rules. Under the NASDAQ rules, a company of which more than 50% of the voting power is held by an individual, group, or another company, is a “controlled company” and may elect not to comply with certain NASDAQ corporate governance standards, including the requirements that:

- a majority of its board of directors consist of independent directors;
- its director nominations be made, or recommended to the full board of directors, by its independent directors or by a nominations committee that is comprised entirely of independent directors and that it adopt a written charter or board resolution addressing the nominations process; and
- it has a compensation committee that is composed entirely of independent directors with a written charter addressing the committee's purpose and responsibilities.

However, as a “foreign private issuer,” NASDAQ corporate governance rules allow us to follow our “home country,” Korea, rules and practice with respect to appointments to our board of directors and committees. We intend to follow home country practice as permitted by NASDAQ rather than rely on the “controlled company” exception to the corporate governance rules. Two members of our board of directors are considered “independent” under NASDAQ corporate governance rules, although we do intend to phase-in an additional independent director for our Audit Committee as permitted by NASDAQ.

The interests of DoubleU Games may differ significantly from those of our Board and our other shareholders. As a result, decisions by DoubleU Games could materially affect our continuing activities, including the sale of our Company to a third party or the ability of our shareholders to obtain a premium on any such sale or on a sale by DoubleU Games of all or part of its shareholding.

Our relationship with DoubleU Games could create potential conflicts of interest in management decisions, which could adversely impact our shareholders.

Although we have substantial contractual arrangements with our controlling shareholder, DoubleU Games, no person is serving concurrently as a director of both companies. Consequently, we have not entered into any agreement intended to govern any conflicts of interest between the two companies. However, under the Korean Commercial Code, or KCC, if a company, such as DDI, intends to enter into any arrangement with any of its major shareholders, such as DUG, such company is required to disclose the intended arrangement to its board of directors and obtain a resolution from the board approving such arrangement. Such approval requires the consent of not less than two-thirds of the board members. Under the KCC, a person would constitute a company's major shareholder if such person holds 10% or more of equity interests in such company (without taking into account any non-voting shares issued by the company) or makes *de facto* influence on such company's key managerial decisions (such as appointment and removal of directors and statutory auditors). Accordingly, in order for the Company and DUG to enter into any arrangement, the Company must seek and obtain a resolution from its board of directors approving the intended arrangement. Given the current board structure, the Company's board resolution would be adopted independently from DUG. To date, the Company and DUG have entered into certain license agreements and loan agreements, all of which have been approved by the Company's board in accordance with the KCC.

Further, unlike U.S. corporate law, Korean law does not recognize the concept of the controlling shareholder's fiduciary duty to a company or any of such company's minority shareholders. Under the KCC, only such company's directors owe a fiduciary duty to the company. However, to the extent such controlling shareholder provides any instruction to a director of such company and any action or inaction taken by such director based on such instruction is found to be in violation of law, such action or inaction taken by the director may be regarded as that taken by such controlling shareholder. In such a case, the controlling shareholder would be required to indemnify the company for any loss incurred as a result of such action or inaction.

We are subject to certain loan agreements with DoubleU Games that could impede our available working capital and adversely impact our business operations and growth strategy.

We entered into several loans with DoubleU Games as our lender in 2018 and 2019, and the aggregate outstanding principal amount as of December 31, 2021 of such loans was US\$42.2 million (KRW50 billion). These loans mature in 2024, subject to certain prepayment rights. Each loan has a fixed interest rate of 4.60% per annum, with a default interest rate of an additional 5.0% per annum. Interest accrues quarterly, commencing as of May 2019, and is due and payable in full upon maturity. Further, if we are unable to repay the loans at maturity in 2024, we may not be able to continue our operations if we are unable to secure additional financing or otherwise restructure the loans. Although these loans are unsecured, we could nonetheless be forced by DoubleU Games to liquidate our operations and dissolve. See "Item 5B. Liquidity and capital resources—Short-term and long-term borrowings."

A significant portion of our intellectual property portfolio is subject to license agreements with DoubleU Games and our operations could be adversely affected by the amount of royalty payments we are required to make under the agreements.

We are subject to a number of licensing and research and development agreements with DoubleU Games. As of April 1, 2022, DoubleU Games controlled approximately 67.1% of our shares. DoubleU Games has granted us exclusive rights during the term of the agreements for development and distribution of social casino game titles and sequels in social online gaming. As of December 31, 2021, we license approximately 42 slot gaming intellectual property rights from DoubleU Games that are actively offered to end users through our games. We are obligated to pay royalties and license fees to DoubleU Games in connection with these rights. The agreement remains in effect until either DUG no longer holds an interest, directly or indirectly, in DDI, or DDI no longer holds an interest, directly or indirectly, in DDI-US. In such event, the

agreement provides that the parties will mutually renegotiate the terms of the agreement. If the parties decide to terminate, it could materially adversely affect our ability to continue to use and exploit these rights and the associated gaming content we distribute through our channels. In such event, our business operations, including our revenues and profitability, could be materially harmed unless and until we are able to create or acquire new revenue streams of comparable financial impact. In addition, our reputation would suffer from the loss of this content and we could lose all or a substantial portion of our players for an indefinite period.

Risks related to the ownership of our common shares and ADSs

As a “foreign private issuer” we are permitted, and intend, to follow certain home country corporate governance and other practices instead of otherwise applicable SEC and stock exchange requirements, which may result in less protection than is accorded to investors under rules applicable to domestic U.S. issuers.

Our status as a foreign private issuer exempts us from compliance with certain SEC laws and regulations and certain regulations of NASDAQ, including certain governance requirements such as independent director oversight of the nomination of directors and executive compensation. Two members of our board of directors are considered “independent” under NASDAQ corporate governance rules, although we do intend to phase-in an additional independent director for our Audit Committee as permitted by NASDAQ. In addition, we are not required under the Exchange Act to file current reports and financial statements with the SEC as frequently or as promptly as U.S. domestic companies whose securities are registered under the Exchange Act and we are generally exempt from filing quarterly reports with the SEC. Also, we are not required to provide the same executive compensation disclosures regarding the annual compensation of our five most highly compensated senior executives on an individual basis as are required of U.S. domestic issuers. As a foreign private issuer, we are permitted to disclose executive compensation on an aggregate basis and need not supply a Compensation Discussion & Analysis, as is required for domestic companies. Furthermore, as a foreign private issuer, we are also not subject to the requirements of Regulation FD (Fair Disclosure) promulgated under the Exchange Act.

The requirements of being a public reporting company require significant resources and management attention and affect our ability to attract and retain executive management and qualified board members.

As a public reporting company, we incur legal, accounting, and other expenses that we did not previously incur as a private company. We are subject to the Exchange Act, including the reporting requirements thereunder, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the NASDAQ rules, and other applicable securities rules and regulations. Compliance with these rules and regulations has increased our legal and financial compliance costs, make some activities more difficult, time-consuming or costly, and increase demand on our systems and resources, particularly after we are no longer an “emerging growth company.” Further, these rules and regulations may make it more difficult and more expensive for us to obtain directors’ and officers’ liability insurance, which could make it more difficult for us to attract and retain qualified members of our board of directors.

Pursuant to Section 404 of the Sarbanes-Oxley Act, once we are no longer an emerging growth company, we may be required to furnish an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of complying with Section 404 of the Sarbanes-Oxley Act will significantly increase, and management’s attention may be diverted from other business concerns, which could adversely affect our business and results of operations. We may need to hire more employees in the future or engage outside consultants to comply with the requirements of Section 404 of the Sarbanes-Oxley Act, which will further increase our cost and expense. In addition, enhanced legal and regulatory regimes and heightened standards relating to corporate governance and disclosure for public companies result in increased legal and financial compliance costs and make some activities more time-consuming.

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As a result of disclosure of information in this annual report and in filings required of a public reporting company, our business and financial condition has become more visible, which may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business and operating results could be adversely affected, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and adversely affect our business and operating results.

If we fail to put in place appropriate and effective internal control over financial reporting and disclosure controls and procedures, we may suffer harm to our reputation and investor confidence level.

We are in the early stages of the process of designing, implementing, and testing our internal control over financial reporting, which process is time consuming, costly, and complex. If we fail to implement the requirements of Section 404(b) of the Sarbanes-Oxley Act in the required timeframe once we are no longer an emerging growth company, we may be subject to sanctions or investigations by regulatory authorities, including the SEC and NASDAQ. Furthermore, if we are unable to conclude that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, and we could be subject to sanctions or investigations by regulatory authorities. Failure to implement or maintain effective internal control over financial reporting and disclosure controls and procedures required of public companies could also restrict our future access to the capital markets.

We do not currently intend to pay dividends on our common shares for the foreseeable future.

We currently do not intend to pay any dividends to holders of our common shares for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Any determination to pay dividends in the future will be at the discretion of our board of directors and subject to limitations under applicable law. Therefore, you are not likely to receive any dividends for the foreseeable future. Moreover, any ability to pay dividends will be restricted by the terms of the current term loan and may be restricted by the terms of any future credit agreement or any future debt or preferred equity securities of us or our subsidiaries. Consequently, investors may need to sell all or part of their holdings of our common shares after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

Holders of ADSs have fewer rights than shareholders under Korean law, and their voting rights are limited by the terms of the deposit agreement.

The rights of shareholders under Korean law to take actions, including voting their shares, receiving dividends and distributions, bringing derivative actions, examining our accounting books and records, and exercising appraisal rights, are available only to shareholders of record. Because the depository, through its custodian agents, is the record holder of our common shares underlying the ADSs, only the depository can exercise those rights under Korean law in connection with the deposited shares. ADS holders will not be able to bring a derivative action, examine our accounting books and records, or exercise appraisal rights through the depository.

Holders of ADSs may exercise their voting rights only in accordance with the provisions of the deposit agreement. Upon receipt of voting instructions from them in the manner set forth in the deposit agreement, the depository will make efforts to vote the shares underlying the ADSs in accordance with the instructions of ADS holders. The depository and its agents may not be able to send voting instructions to holders of ADSs or carry out their voting instructions in a timely manner. Furthermore, the depository and its agents will not be responsible for any failure to carry out any instructions to vote, for the manner in which any vote is cast, or for the effect of any such vote. As a result, holders of ADSs may not be able to exercise their right to vote.

If Korea experiences certain economic, political or other events, the government may restrict holders of our ADSs and the depositary from converting and remitting dividends and other amounts in U.S. dollars.

Under the Korean Foreign Exchange Transaction Law, if the Korean government deems that certain emergency circumstances, including sudden fluctuations in interest rates or exchange rates, extreme difficulty in stabilizing the balance of payments or substantial disturbance in the Korean financial and capital markets, are likely to occur, it may impose any necessary restrictions as requiring Korean or foreign investors to obtain prior approval from the Minister of Economy and Finance of Korea for the acquisition of Korean securities or the repatriation of interest, dividends, or sales proceeds arising from disposition of such securities or other transactions involving foreign exchange.

We may be subject to securities class actions, which may harm our business and operating results.

Companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and damages and divert management's attention from other business concerns, which could seriously harm our business, results of operations, financial condition, or cash flows.

We may also be called on to defend ourselves against lawsuits relating to our business operations and/or the industry in which we operate. Some of these claims may seek significant damage amounts due to the nature of our business. Due to the inherent uncertainties of litigation, we cannot accurately predict the ultimate outcome of any such proceedings. A future unfavorable outcome in a legal proceeding could have an adverse impact on our business, financial condition, and results of operations. In addition, current and future litigation, regardless of its merits, could result in substantial legal fees, settlement or judgment costs, and a diversion of management's attention and resources that are needed to successfully run our business.

We may amend the deposit agreement without consent from holders of ADSs and, if such holders disagree with our amendments, their choices will be limited to selling the ADSs or withdrawing the underlying common shares.

We may agree with the depositary to amend the deposit agreement without consent from holders of ADSs. If an amendment increases fees to be charged to ADS holders or prejudices a material right of ADS holders, it will not become effective until 30 days after the depositary notifies ADS holders of the amendment. At the time an amendment becomes effective, ADS holders are considered, by continuing to hold their ADSs, to have agreed to the amendment and to be bound by the amended deposit agreement. If holders of ADSs do not agree with an amendment to the deposit agreement, their choices will be limited to selling the ADSs or withdrawing the underlying common shares. No assurance can be given that a sale of ADSs could be made at a price satisfactory to the holder in such circumstances.

The right of holders of ADSs to participate in any future rights offerings may be limited, which may cause dilution to their holdings and holders of ADSs may not receive cash dividends if it is impractical to make them available to them.

We may, from time to time, distribute rights to our shareholders, including rights to acquire our securities. However, we cannot make any such rights available to our ADS holders in the United States unless we register such rights and the securities to which such rights relate under the Securities Act or an exemption from the registration requirements is available. In addition, the deposit agreement provides that the depositary bank will not make rights available to ADS holders unless the distribution to ADS holders of both the rights and any related securities are either registered under the Securities Act or exempted from registration under the Securities Act. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, you may be unable to participate in our rights offerings in the future and may experience dilution in your holdings.

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The depositary has agreed to pay ADS holders the cash dividends or other distributions it or the custodian receives on our common shares or other deposited securities after deducting its fees and expenses. However, because of these deductions, ADS holders may receive less, on a per share basis with respect to their ADS than they would if they owned the number of shares or other deposited securities directly. ADSs holders will receive these distributions in proportion to the number of common shares the ADSs represent. In addition, the depositary may, at its discretion, decide that it is not lawful or practical to make a distribution available to any holders of ADSs. For example, the depositary may determine that it is not practicable to distribute certain property through the mail or that the value of certain distributions may be less than the cost of mailing them. In these cases, the depositary may decide not to distribute such property and ADS holders will not receive such distribution.

Holders of ADSs may not receive distributions on our common shares or any value for them if it is illegal or impractical to make them available to such holders.

The depositary of our ADSs has agreed to pay holders of ADSs the cash dividends or other distributions it or the custodian for our ADSs receives on our common shares or other deposited securities after deducting its fees and expenses. Holders of ADSs will receive these distributions in proportion to the number of our common shares that such ADSs represent. However, the depositary is not responsible for making such payments or distributions if it is unlawful or impractical to make a distribution available to any holders of ADSs. For example, it would be unlawful to make a distribution to a holder of ADSs if it consists of securities that require registration under the Securities Act, but that are not properly registered or distributed pursuant to an applicable exemption from registration. The depositary is not responsible for making a distribution available to any holders of ADSs if any government approval or registration required for such distribution cannot be obtained after reasonable efforts made by the depositary. We have no obligation to take any other action to permit distributions on our common shares to holders of ADSs. This means that holders of ADSs may not receive the distributions we make on our common shares if it is illegal or impractical to make them available to such holders. These restrictions may materially reduce the value of our ADSs.

Holders of ADSs may be subject to limitations on transfer of their ADSs.

ADSs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer, or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deems it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

ADS holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our common shares provides that, to the fullest extent permitted by law, ADS holders waive the right to a jury trial for any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs, or the deposit agreement, which may include any claim under the U.S. federal securities laws.

If we or the depositary were to oppose a jury trial based on this waiver, the court would have to determine whether the waiver was enforceable based on the facts and circumstances of the case in accordance with applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, or by a federal or state court in the City of New York, which has jurisdiction over matters arising under the

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deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver, courts will generally consider whether a party knowingly, intelligently, and voluntarily waived the right to a jury trial. We believe that this would be the case with respect to the deposit agreement and the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before investing in the ADSs.

If you or any other holders or beneficial owners of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other holder or beneficial owner may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us or the depositary. If a lawsuit is brought against us or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have, including outcomes that could be less favorable to the plaintiff(s) in any such action.

Nevertheless, if this jury trial waiver is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation, or provision of the deposit agreement or the ADSs serves as a waiver by any holder or beneficial owner of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder.

Dividend payments and the amount you may realize upon a sale of our common shares or ADSs that you hold will be affected by fluctuations in the exchange rate between the U.S. dollar and the Korean Won.

Cash dividends, if any, in respect of our common shares represented by our ADSs will be paid to the depositary in Korean Won and then converted by the depositary into U.S. dollars, subject to certain conditions. Accordingly, fluctuations in the exchange rate between the Korean Won and the U.S. dollar will affect, among other things, the amounts a holder of ADSs will receive from the depositary in respect of dividends, the U.S. dollar value of the proceeds that a holder of ADSs would receive upon sale in Korea of our common shares obtained upon surrender of ADSs, and the secondary market price of ADSs. Such fluctuations will also affect the U.S. dollar value of dividends and sales proceeds received by holders of our common shares.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Our Company was originally established as The8Games Co., Ltd., in Seoul, Korea in 2008, an interactive entertainment studio focused on the development and publishing of casual games and mobile applications. In 2016, DUG acquired a controlling stake in our Company and, in 2017, DUG acquired the remaining stake in our Company, making us a wholly-owned subsidiary of DUG. Later in 2017, DUG also acquired DDI-US through our Company, believing that our strengths could be highly complementary to DDI-US for creating more powerful social casino gaming content. We changed our name to DoubleDown Interactive Co., Ltd. in December 2019. In February 2020, we acquired Korea-based Double8 Games from DoubleU Games. Our ADSs representing common shares have been listed and traded on The NASDAQ Stock Market under the symbol “DDI” since August 31, 2021.

Our agent for service of process in the United States is DoubleDown Interactive, LLC, 605 5th Avenue, Suite 300, Seattle, Washington 98104. Our principal executive offices are located at 13F, Gangnam Finance Center, 152, Teheran-ro Gangnam-gu, Seoul 06236, Korea. Our main telephone number is +82-2-501-7216. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that make electronic filings through its Electronic Data Gathering, Analysis, and Retrieval (“EDGAR”) system. All our Exchange Act reports and other SEC filings will be available through the EDGAR system. Our internet website is <https://doubledowninteractive.com>. The information contained in, or that can be accessed through, our website is not incorporated by reference into, and is not a part of, this annual report. We have included our website address in this annual report solely for informational purposes.

B. Business Overview

We are a leading developer and publisher of digital games on mobile and web-based platforms. We are the creators of multi-format interactive entertainment experiences for casual players. Our flagship game, *DoubleDown Casino*, has been in the top 25 grossing mobile games annually on Apple App Store (iPhone) since 2015, according to *App Annie*.

We have been an early pioneer in the social casino gaming segment of casual gaming and were among the initial publishers to launch a social casino game on the Facebook platform in 2010 with the release of *DoubleDown Casino*. As the market has shifted materially to mobile platforms in recent years, we have also embraced new distribution channels for our games, which have significantly expanded our overall reach and market opportunity. Our games attract players of social casino and casual games, and have been installed over 115 million times to date. During 2021, an average of 2.4 million players played our games each month.

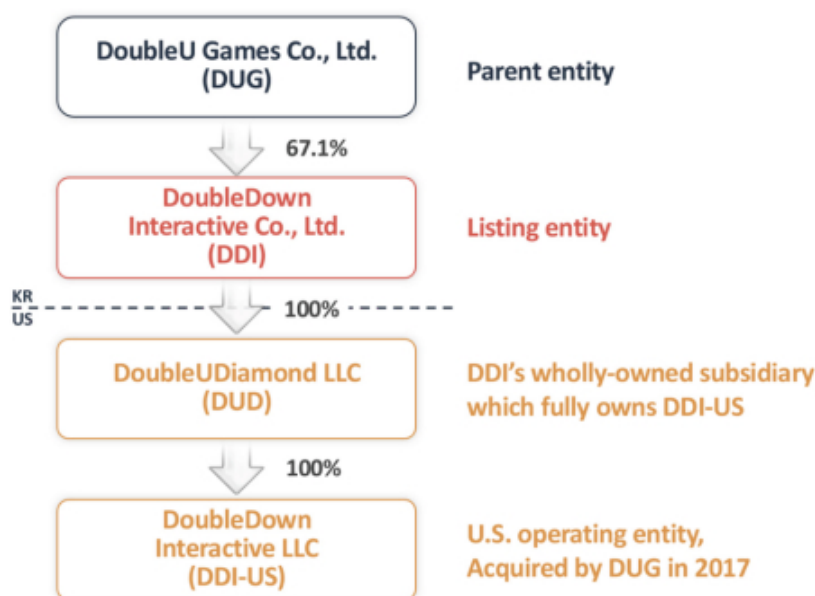
Our market opportunity includes casual gaming globally, which includes slots, puzzle, card, match three and other similar games. *Sensor Tower* estimated that the global market for mobile casual games was \$22.4 billion in 2021, an increase of approximately 13% from 2020. Within the social casino segment of casual gaming, which includes free-to-play online slots, poker, table games, and bingo, *DoubleDown Casino* was ranked third among the top game titles by revenue during 2021, according to *Eilers & Krejci*. The global social casino market was \$7.6 billion in 2021, and is estimated to grow at 2.7% over the next four years to reach \$8.5 billion by 2025, according to *Eilers & Krejci*. As one of the leading players in social casino today, we believe we are well-positioned to combine our social casino expertise with additional game elements to deliver entertaining playing experiences for our players.

We believe that success in casual gaming requires a combination of creativity and data science to acquire, engage and retain players. We have a deep understanding of our players which allows us to hone our game development, content strategy, and live game operations. Our all-in-one approach that combines numerous pieces of content within a single game streamlines the player experience while our best-in-class gaming elements, including graphics, user interface, and meta-features, such as daily challenges and loyalty programs, keep our players engaged. Collectively, our players exhibit higher monetization compared to that of our social casino peers, which we believe reflects our successful approach. Our ARPDAU was \$0.97 during 2021.

We believe our access to content is among the broadest in the gaming industry. In addition to our internally-developed content, we also have access to content from IGT, one of the largest casino equipment suppliers in the world, and creator of well-known slot games such as *Cleopatra*, *Wolf Run*, and *Megabucks*, as well as from DoubleU Games, our controlling shareholder and a leading developer and publisher of social casino games based in Korea. Since 2008, we have had access to over 2,000 slot titles through our partnerships with IGT and DUG and we have internally developed a catalogue of over 44 original slot titles. We continue to provide our players with a superior gaming experience by leveraging our three content pillars: DDI, IGT, and DUG.

The roots of our business

Our Company was originally established as The8Games Co., Ltd., in Seoul, Korea in 2008, an interactive entertainment studio focused on the development and publishing of casual games and mobile applications. In 2016, DUG acquired a controlling stake in our Company and the remaining stake was acquired by DUG in 2017, making us a wholly-owned subsidiary. Later in 2017, DUG also acquired DDI-US through our Company, believing that our strengths are highly complementary to DDI-US for creating more powerful social casino gaming content. We hold DDI-US through DUD, which is our wholly-owned subsidiary that fully owns DDI-US. We changed our name to DoubleDown Interactive Co., Ltd. in December 2021.



Through the acquisition of DDI-US, we have transformed into one of the world's leading social casino publishers. DDI-US, our principal operating subsidiary, has been one of the early pioneers of social casino games on mobile and web-based platforms since the origination of the genre in the late-2000s. DDI-US was founded in 2010 with the launch of its flagship game, *DoubleDown Casino*. The company was among the initial publishers to launch a social casino game on Facebook, where *DoubleDown Casino* rapidly gained popularity and became the fourth most user-recommended Facebook game across all genres in 2011, according to Facebook. *DoubleDown Casino* was subsequently launched on the Apple and Google platforms in 2012, which greatly expanded its distribution and player reach. In addition to being an industry pioneer, DDI-US has also proven to be an early innovator. For example, DDI-US was among the first to leverage authentic land-based content in mobile and web-based games. DDI-US was also the first to introduce a tournament feature with the introduction of *Social Slot Tournament* in 2011, which offered a real-time competitive environment for players to play against other players instead of against the house. With constant innovation, our games continue to perform well over time.

Prior to our acquisition of DDI-US in 2017, it had been a wholly-owned subsidiary of IGT since 2012, which at the time was the global leader in the design, development, and manufacture of gaming machines. Following IGT's acquisition, DDI-US began to leverage IGT's expansive selection of land-based casino content, which we continue to utilize through a licensing agreement, to release proven slot titles that enrich the authentic playing experience of our games.

Since our acquisition of DDI-US in 2017, DUG has brought our Company powerful casino content and the operating expertise of an early mover and leader in social casino gaming. DUG's strong execution capabilities in post-

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merger integration have delivered a seamless assimilation post-acquisition and optimized synergies. Particularly, DUG's operating know-how has helped us enhance our data analytics, incorporate best-in-class meta-features into our games, and develop more efficient marketing and user acquisition capabilities.

Our proprietary capabilities, coupled with our access to IGT's content and DUG's content and capabilities, give rise to three fundamental pillars through which we provide our players with high-quality content and superior gaming experiences.



- *Proven creative and technological competencies of DDI:* We have a sophisticated approach in developing original slot content and have demonstrated our innovation and creativity across social casino and casual mobile games. Furthermore, our centralized slot research and development function can quickly and efficiently incorporate slot content from IGT and DUG through a process known as “porting,” in which existing slot content from a third-party library is adapted into our games. Our technological competencies extend to live game operations, our use of data and analytics to tailor the gaming experience on a player segment-specific level to improve user acquisition, drive increased gameplay, and boost player spending in the in-game economy.
- *Proven authentic land-based content from IGT:* IGT offers us access to over 2,000 slot titles that we can port into our games. We closely monitor their land-based market performance and select top-performing titles to incorporate into our games. Content from IGT features iconic slot titles and authentic casino gameplay mechanics that appeal to a large audience of loyal players, with a particular focus on those who enjoy land-based slot machines. Current and future land-based slot titles from IGT provide a large and growing pipeline of slot content.
- *Exclusive original social casino content and proven execution capabilities from DUG:* DUG has built a collection of over 300 original slot titles that have been optimized for social casino experiences. We have exclusive access to DUG's growing slot content that appeals to both authentic and casual players. In addition, DUG provides expertise in operating social casino mobile games, which enables us to improve execution across numerous aspects of our business including game development, marketing and user acquisition, and live game operations.

Industry overview and market opportunity

Gaming has gained widespread popularity over the last decade and has become one of the largest forms of entertainment globally. Consumer spending on gaming was projected to be approximately \$176 billion in 2021, according to data from *Newzoo 2021*, which would be more than two times the actual combined consumer spending in 2021 on music and at the global cinematic box office, \$47.4 billion and approximately \$21.4 billion, respectively, according to *The Business Research Company and Gower Street Analytics*. As consumers spend an increasing amount of time and money on digital devices, digital gaming has become the fastest growing segment within gaming according to *ResearchandMarkets.com*. According to *Newzoo 2020*, it was estimated that there will be 3.0 billion gamers in 2021. This has been driven by a number of technology and consumer trends:

- *Growth of mobile platforms and entertainment increasingly consumed through mobile.* According to data from Newzoo Online, the number of active smartphone users globally was expected to grow by 6.1% to 3.9 billion users in 2021. According to data from eMarketer, an average U.S. adult spent an average time of 4 hours and 23 minutes per day on a smartphone (non-voice) in 2021; time spent on consuming content via mobile devices was expected to surpass time spent watching TV for the first time in 2019. We believe this trend presents an opportunity for greater engagement with players on mobile devices.
- *Role of app stores as distribution and payment gateways.* Developers are now able to distribute apps to global audiences and regularly update the apps with new content and features. App stores are now a popular destination for users to find and access content, and also serve as integrated payment systems where users can conveniently make purchases in a trusted and secure setting. According to Sensor Tower, mobile games accounted for 69.3% of total revenue worldwide across Apple App Store, Google Play Store, and other third-party platforms in 2021.
- *Success of the free-to-play model has widened appeal of gaming to the masses.* Free-to-play games have significantly increased the revenue potential of mobile and web-based games by eliminating upfront barriers and facilitating purchases throughout the player lifecycle. Free-to-play games allow for a wider audience, increasing the number of potential paying players and enhancing the overall game experience by facilitating greater social interaction among players. Through offering a variety of in-game purchase options, players can spend according to their entertainment value derived from the game which allows developers to maximize revenue from their existing player base.

We also believe that the competencies required to succeed in the market have evolved:

- *Scale is increasingly important.* While developer tools and app store distribution have lowered the technical barriers to entry, long-term success generally favors larger gaming companies. Only a small fraction of games reaches meaningful scale. Through 2021, only 1,394 games of more than a million games available on Google Play Store and Apple App Store generated over \$5 million of revenue, according to Sensor Tower. As games compete for limited playing time, gaming companies with an ability to invest significant amounts of resources to marketing, research and development, and ongoing costs are able to improve the probability of success. There is also a virtuous cycle whereby top-ranked games drive greater organic growth, which promotes higher social engagement and sharing. This translates to a potential larger player base which provides more data from which more effective user acquisition and engagement strategies can be formulated.
- *Content is a key differentiator.* Gaming companies face significantly higher costs to develop, market, and operate games. As greater resources are invested in these games, players have become more engaged and deeply invested in the games they play, resulting in higher switching costs. We believe both new and existing games have shown a higher inclination towards proven and recognizable content as a key form of differentiation to improve the likelihood of success in the long-term.
- *Increasing longevity of games.* Games have evolved into services, significantly extending the lifecycles of successful games. According to data from Sensor Tower and Cowen and Company, the top 25 grossing games on Apple App Store were first released an average of over five years ago. It is generally considered more efficient to grow an existing game with an established player base than to

develop a new game and acquire players. Facilitated by a shift in monetization strategy towards more in-game purchases, greater ability to update games post-launch via app store platforms, and the incorporation of social aspects into the games, players stay engaged longer, which in turn drives higher and more stable monetization. As the lifecycles of games continue to increase, we believe that strong, data-driven live operations capabilities are crucial to optimize games to drive long-term and sustainable value.

We believe that our market opportunity includes casual gaming globally, which includes slots, puzzle, card, match three and other similar games. *Eilers & Krejcik* defines casual games as games that have simple decision-making with the ability for players to start or stop playing at any time without heavily impacting the overall experience. *Sensor Tower* estimated that the global market for mobile casual games was \$22.4 billion in 2021, an increase of approximately 13% from 2020. The global social casino market was \$7.6 billion in 2021, and is estimated to grow at 2.7% over the next four years to reach \$8.5 billion by 2025, according to *Eilers & Krejcik*. We believe that casual and social casino genres are converging, blending elements into new games. As one of the leading players in social casino gaming today, we believe we are well-positioned to combine our social casino expertise with additional game elements to deliver entertaining playing experiences for our players. Our management and development teams have experience developing both social casino and casual games.

Our value proposition to players

Each of our games is targeted at a broad and diverse set of players, ranging from social casino enthusiasts to casual gamers. Our games are evergreen in nature, in known formats, self-directed in pace and session length, and incorporate a regular cadence of in-game events. We believe that our gameplay style unlocks an audience that has historically been underserved by gaming, as our data reflects our average player skews female, older, and with higher income compared to the gaming industry average according to data from the *Entertainment Software Association*, thereby potentially supporting higher retention and monetization.

While the majority of our players engage with our authentic land-based casino content, we believe significant opportunity exists in broader casual and social segments. Our all-in-one approach to each game allows for all types of players to engage with our content within the same game. In addition, we believe that engaging graphics, innovative meta-features, and a mobile-first experience will expand the range of player segments we address. Our diversity of content within one game, ranging from authentic to casual, appeals to numerous types of players. Our longest-standing game, *DoubleDown Casino* contains over 200 titles.

Our All-in-One Approach



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We believe that our games offer a compelling value proposition to players that drives their loyalty and continued engagement and monetization:

Proven library of content: We have a diverse library of content to entertain and engage players, including proven social casino gaming content developed by DUG; authentic, land-based casino content from IGT; and innovative, original content developed internally. DUG and IGT's content libraries include widely-known titles with strong player affinities that drive player interest and engagement. The breadth of our content allows us to target a wide spectrum of player segments. Based on continual analysis of in-market performance of DUG titles and IGT land-based machines, we are able to carefully select top performing content to port to our games.

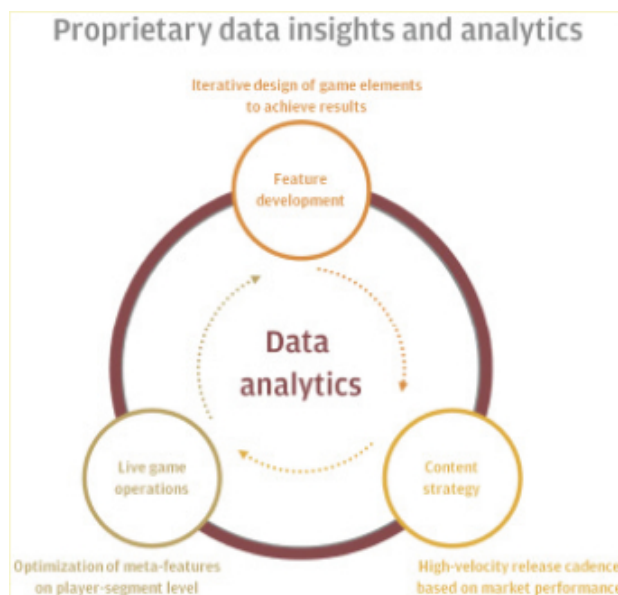
Cross-platform playability: Our players can play our games anytime and anywhere on mobile and web-based platforms. Our games are available on all major platforms including Apple App Store, Facebook, Google Play Store, and Amazon Appstore. The accessibility of our games allows players to engage with our content in their preferred format.

All-in-one approach: Each of our games provides a one-stop shop for gaming entertainment with diversified content. We believe that users prefer fewer apps on their smartphones, not more. According to a 2017 *comScore* study, smartphone and tablet users, age 18 or older, spent 96% of their time on their personal top ten apps. To play a multitude of our content, players are only required to download one game. The content choices available within each game allow the player to tailor the experience to their preferences, and the unified environment lowers the barrier to new content discovery, enhancing entertainment and engagement for our players. Additionally, players are able to earn rewards and spend currency in one environment rather than being fragmented across multiple apps, thereby enhancing loyalty.

Enhanced player experience: Our social casino games are designed to deliver a best-in-class mobile gaming experience, including engaging graphics, user interface and meta-features. For example, features such as *DoubleDown Casino's* Megabucks room give players an opportunity to win large jackpots while playing iconic, authentic slots.

Our data-driven approach

We employ a data-driven approach throughout our business, from new game strategy to live operations of existing games. We have been operating in this manner for over ten years, and have developed a system of analysis leveraging our longevity and depth of player information. Our analytic capabilities allow for real-time and more accurate analysis, thereby reducing our reliance on third-party providers. We continually analyze and test granular changes to features, content, and live game operations to hone our offering.



Feature development

We build features that are designed to enhance the gaming experience for our players and drive engagement and monetization. Prior to full launch, we employ a variety of testing processes, including alpha testing, beta testing, and targeted launches, to estimate granular impacts on player behavior. Based on our analysis of test results, we are able to predict whether implementation of the feature will drive increased playing time or session frequency, or generate additional purchases in the in-game economy for particular player segments. We hone our features in an iterative process prior to full release. We develop features to continue to grow our player base, increase our current players' engagement with our games, and boost player monetization within our games. For example, to drive higher monetization of players, we tested an enhanced jackpot feature designed to provide greater jackpot wins during a limited period of time. Our testing confirmed that such a feature motivated higher wager levels and related purchases. As a result, the Jackpot Happy Hour feature was introduced to all players in *DoubleDown Casino*.

Content strategy

We release new content with a high velocity cadence, typically every 1.5 weeks. Fresh content is important in heightening player engagement, providing new opportunities for players to utilize virtual chips, and motivating additional purchases. We continually analyze in real-time how our slot titles are performing across our games to provide insights into which content in our development pipeline is optimal to introduce next. We extend our performance analysis to all in-market titles, and our development speed enables us to be a fast-follower for any type of content gaining traction in the market. If our data analytics show a particular style of content driving increases in monetization or number of playing sessions per player, we believe we can quickly

and efficiently introduce related content. For example, our decision to expand the scope of our content beyond authentic slot titles to include more original social casino content was based on the strong positive data trends seen in the performance of initial content launches of this type.

Live game operations

We use our data and analytics to tailor the application of meta-features on a player segment-specific level to improve user acquisition, drive increased gameplay, and boost spend in the in-game economy. Based on our real-time analysis of how a specific player reacts to specific changes in gameplay mechanics or communications, we can tailor the gaming experience of the player or the special offers the player receives. We can utilize these insights to optimize our user acquisition spend, gameplay mechanics, and monetization efforts to other players with similar behavior. Our customized analytics improve over time as we optimize these live operations functions daily. Our data-driven live game operations is a core capability that we believe helps to boost our marketing efficiency and increase engagement and monetization of existing players. For example, we are able to deliver optimized purchase offers to first-time payers based on initial playing behavior of each new player cohort.

Our strengths

All-in-one strategy offers scalability, player insights, and operational efficiency

Our all-in-one approach allows our players to access our extensive library of slot content through a single game download. We believe that by consolidating players of multiple slot titles into fewer games, we have built a larger and more connected player base, fostering a stronger sense of loyalty among players and promoting higher levels of engagement with our content. Additionally, we believe that the singular environment of our games facilitates discovery of new content and leads to increases in the number of playing sessions over time. For 2021, the average number of playing sessions per day increased 17.3% compared to 2020.

The all-in-one approach provides an enhanced understanding of our players as all of their behaviors take place within the same game. We leverage our proprietary, in-house developed analytic tools to capture rich data insights we can leverage throughout our entire game development and operation process. Additionally, our players self-select slot content that they want to play within our game, thereby revealing their preferences and playing style over time, which we can utilize to effectively introduce new content and features for further monetization opportunities.

By centralizing our content into fewer games, we can also adopt a more focused and efficient approach to user acquisition. Our all-in-one approach improves our marketing efficiency, promotes awareness of our games, and reduces cannibalization across multiple games.

Access to deep content libraries and proven track record of developing new content

We believe our content library, underpinned by our three pillars for content access and development, is among the deepest in casual gaming and allows us to target a wide audience of players globally. We have access to hundreds of highly recognizable, branded land-based slot titles through our partnership with IGT which enables us to deliver an authentic casino floor experience to our players. In addition to deep content libraries of IGT-developed slots such as *Cleopatra*, *Wolf Run*, and *Megabucks*, the IP License Agreement with IGT allows us to gain access to other iconic third-party slots, such as *Wheel of Fortune*. Our parent company, DUG, also has deep experience in developing social casino games. More than 300 titles are available to us exclusively, further enriching our content library. Both IGT and DUG's content further extends the range of player segments we can address, which we believe is a competitive advantage over our peers.

In addition to IGT and DUG content, our in-house research and development team develops proprietary slot content. Collectively, we have had access to over 2,000 slot titles through our partnerships with IGT and DUG and we have internally developed a proprietary catalogue of over 44 original slot titles.

Comprehensive player lifecycle management

We employ a rigorous, data-driven approach to player lifecycle management from user acquisition to ongoing engagement and monetization. We use internally-developed analytic tools to segment and target players and to optimize user acquisition spend across multiple channels. Once a player is acquired, our proprietary analytic tools dissect their playing behavior on a granular level. We build a sophisticated understanding of our players that allows us to tailor game mechanics, features, and offers to drive increased gameplay or number of playing sessions. Greater engagement from our players has a flywheel effect of further improving our data analytics and ability to retain those players through customized game elements. As the players progress in their lifecycle, we also use our data analytics capabilities to boost monetization. We strategically deploy personalized special offers and tune gameplay to drive additional player spend. We believe our comprehensive, data-driven approach to managing players throughout the entirety of their lifecycle drives better monetization than our competitors, resulting in ARPDAU of \$0.97.

Robust technology platform

We operate on a centralized, cloud-based technology platform which enables us to consistently launch high-quality slot content and operate our games on a global level. Our robust infrastructure allows us to capture and analyze player data in real-time, which fuels our development and operations. In addition, we have proprietary porting capabilities that allow us to implement content from DUG and IGT quickly and efficiently, which enables our high velocity approach to content development. Our shared code base also increases speed to market for new content, features, and services while minimizing development costs, as we are able to roll-out software and content updates across all of our games simultaneously. Lastly, our high-capacity servers minimize loading time and service outage risks, contributing to a streamlined and consistent gaming experience for our players.

Deep talent pool and shareholder support

We have a global development team with extensive experience across multiple geographies and functions. Our management team and employee base have a proven track record of creating and scaling social casino and casual games. For example, in 2016, our senior management launched *Catch Monsters*, a casual game for the Facebook platform. Our talent pool of 219 employees is comprised of highly experienced engineers, creative artists, product managers, data scientists and market researchers. We also benefit from our controlling shareholder DUG, a leader in the social casino gaming industry, with whom we regularly engage to share best practices.

Our strategies

Maximize

We plan to develop new content and features within our existing games to grow the number of active players in our existing player segments. We intend to improve engagement and monetization of our existing players by leveraging enhanced data insights gained from our analytic capabilities. In addition, we aim to utilize our rich data to hone our development, marketing, and live game operations efforts to drive additional player engagement and monetization. We also aim to efficiently deploy our marketing spend to attract new players to our platform for both our existing games and future new games in our existing gaming categories.

Expand

We intend to build, launch and scale additional games in adjacent gaming segments using our skilled and experienced creative and technical experts many of who have worked on successful mobile games outside social casino. This includes expansion into new gaming categories such as action role-playing games, or RPG, casual casino, and hyper-casual to capture an increased share of the fast-growing mobile games market. For example, we launched our first action RPG game, *Undead World: Hero Survival*, in the United States and Canadian markets in the second

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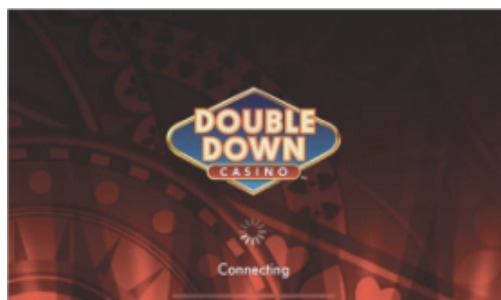
half of 2021. We believe we can further leverage our existing content to grow in regions that share familiarity with our current content and gameplay features, such as Australia and Western Europe.

Acquire

We intend to pursue selective merger and acquisition opportunities to expand our capabilities and grow our industry and geographic footprint. Our management team has a demonstrated track record of execution and integration for strategic mergers and acquisitions, having been successful in integrating content and capabilities from our controlling shareholder, DUG. We believe we can further maximize the value of acquired assets by leveraging our scalable platform and deep talent pool.

Our games

DoubleDown Casino (launched in April 2010)



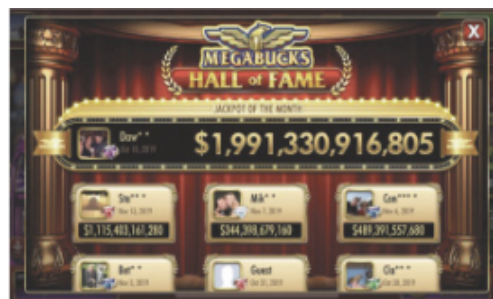
Start screen



Lobby



Slot game start screen

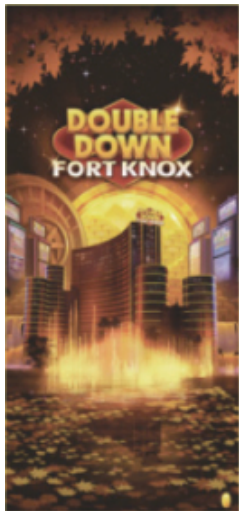


Hall of Fame History showing player ranking

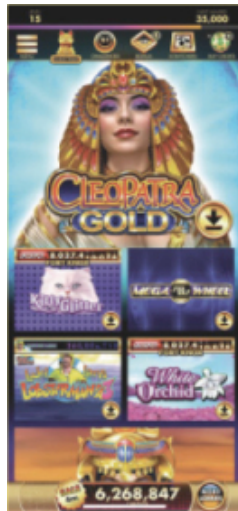
DoubleDown Casino, our flagship game, targets social casino gamers who value authentic Vegas-style gameplay. The game replicates the land-based casino environment and utilizes our internally-developed slot titles, as well as those from IGT and DUG. A pioneer in the social casino gaming industry, *DoubleDown Casino* was first introduced in April 2010 on Facebook and achieved 10 million cumulative downloads in just 23 months. In February 2012, the *DoubleDown Casino* mobile app was launched on Apple App Store, Google Play Store, and Amazon Appstore. In 2018, we fully renewed the game by incorporating additional content, including from DUG, along with additional engaging in-app features such as High Limit Room, Jackpot Happy Hour, vouchers and coupon systems, and more granular membership segmentation. *DoubleDown Casino* features 180 free-to-play slots as of December 31, 2021. Almost a decade after its initial launch, *DoubleDown Casino* remains one of the most recognized social casino games, and ranked third among the top game titles by revenue during 2021, according to *Eilers & Krejcik*.

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DoubleDown Fort Knox (launched in April 2018)



Start screen



Lobby



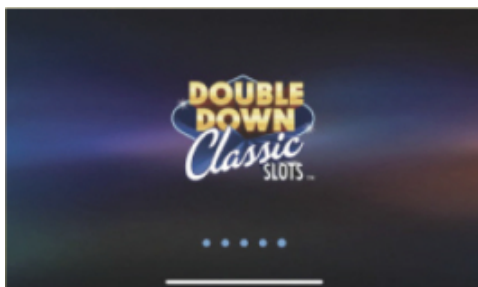
Slot game start screen



Time-based bonuses

DoubleDown Fort Knox is offered as a mobile app on Apple App Store and Google Play Store. *DoubleDown Fort Knox* utilizes an advanced technology platform allowing for an immersive experience which appeals to a younger player demographic. Additionally, *DoubleDown Fort Knox* offers a suite of compelling meta-features, including daily bingo challenges and progress boosters. *DoubleDown Fort Knox* features 99 slots and had recorded over 3.9 million cumulative installations as of December 31, 2021.

DoubleDown Classic (launched in July 2017)



Start screen



Lobby



Slot game start screen



Daily Bonus

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DoubleDown Classic focuses on players with a strong appetite for classic wheel-based slot games, who prefer an old-fashioned, mechanical, reel-based gaming experience. In this game, players can find some of the most traditional and popular 3-reel and 5-reel slots seen in land-based casinos, which are designed to maximize authenticity of the gaming experience. *DoubleDown Classic* is offered through Apple App Store and Google Play Store, with over 2.0 million cumulative installations as of December 31, 2021.

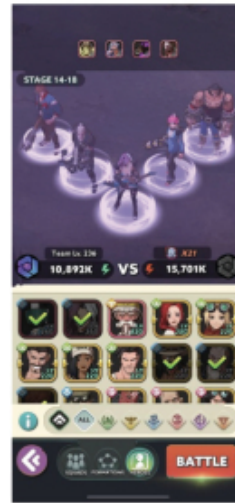
Undead World: Hero Survival (launched in September 2021)



Start screen



Lobby



Character placement screen



PvE game play screen

Undead world: Hero Survival is offered as our first RPG style, a turn-based mobile adventure game which appeals to younger generations. This game allows players to collect heroes and build a team to battle zombie hordes. Heroes can be gained via gameplay or can be unlocked as in-game rewards. Heroes level up by gaining experience by completing quests or battles. *Undead world: Hero Survival* offers meta-features, including daily feature quests and idle rewards. *Undead world: Hero Survival* had recorded over 670,000 cumulative installations as of December 31, 2021.

Technology infrastructure

We operate our games on robust technology infrastructure. We utilize an Amazon Web Service-based data infrastructure that enables stable and agile data management. We designed our platform with multiple layers of redundancy to guard against data loss and to deliver high availability. Our data centers are currently located in Virginia and California. Our high-capacity servers support our data and analytics capabilities.

Our technology platform enables us to port new content ourselves. Our systematic ability to port gaming content from both DUG and IGT has enabled us to customize content for our gaming environment, so that we can provide a more consistent interface with improved aesthetics to ensure a seamless experience for our players.

We operate using a shared code base. Our shared code base improves speed to market and minimizes development costs. Our shared global architecture enables every innovation and upgrade to our infrastructure to be simultaneously available to all of our games and development teams. We are able to continuously incorporate learnings across our platform to optimize performance.

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Our platform partners

Our games are primarily distributed, marketed, and promoted through third party platform providers, primarily Apple App Store, Facebook, Google Play Store, and Amazon Appstore. Most of the virtual chips we sell are purchased using the payments processing systems of these platform providers. These platforms generally charge us approximately 30% of the gross receipts they collect from our players.

Our use of mobile and web-based platforms and data derived from such platforms is subject to each platform provider's standard terms and conditions for application developers, which govern the promotion, distribution and operation of games and other applications on their platforms. Our platform providers have the ability to make unilateral changes to their platforms, their terms of service, the amounts of or method by which our players obtain content and make payments, how they are paid, and any other aspect of their platforms and services. Those changes may negatively impact how our games work, how players interact with our games, and our ability to attract and monetize players.

Technology and content development

We have a dedicated technology and content development team that works to expand our player reach, and impact with new, innovative games. Since the acquisition of DDI-US from IGT in 2017, we have endeavored to strengthen our in-house development capabilities to enable us to be less reliant on third-party licensing arrangements, primarily with IGT and DUG, by developing proprietary intellectual property. We consider it important to create new and innovative games on a continuing basis in order to attract and retain players and, ultimately, to increase our market share.

Our development operations are based in our Seoul headquarters facility, which includes a Korea game development center. The Korea center has approximately 147 employees who focus on the design, development, testing and delivery of our social casino games as well as the integration of our gaming platform with other internet applications and platforms. Our expenditures on technology and content development were approximately \$18.5 million in 2021 and approximately \$18.8 million in 2020. We anticipate that our expenditures will increase 10~15% annually over the next three to five years.

Marketing

We focus our marketing efforts on acquiring new players and retaining existing players. We acquire players both organically and through paid channels. Our paid marketing includes performance marketing and dynamic media buying on Facebook, Google, and other channels such as mobile ad networks. Underlying our paid marketing efforts are our data analytics that allow us to estimate the expected value of a player and adjust our user acquisition spend to a targeted payback period. Our broad capabilities in promotions allow us to tailor promotional activity around new releases, execute differentiated multi-channel campaigns, and reach players with preferred creative content. In addition to our paid player acquisition efforts, we acquire players organically. Our expansive base of players attracts other players to our games through the viral and sharing features provided by social networks, the social innovations in our games, and the network effects of our business. The social innovations in our games include tournaments, bonuses for friend invites, and social network leaderboards. Our games' prominent rankings on app store distribution channels also boost organic installations.

Our player retention marketing includes advertising on Facebook as well as outreach through email, push notifications, and social media posts on channels such as Facebook, Instagram, and Pinterest. Our data and analytics also inform our retention marketing efforts. Campaigns are specially designed for each channel based upon player preferences for dimensions such as time of day and creative content. We consistently monitor marketing results and return on investment, replacing ineffective marketing tactics to optimize and improve channel performance.

Competition

We face significant competition in all aspects of our business. Our primary social casino game competitors include Playtika (acquired by a group of investors led by Shanghai Giant Network Technology Co.), Product Madness/Big Fish Games (subsidiaries of Aristocrat), Zynga Inc., and SciPlay. Our principal competitors in the broader casual game market include Electronic Arts, Activision Blizzard, Electronic Arts, Take Two Interactive, Kabam, Rovio, and Tencent Holdings. On the broadest scale, we compete for the leisure time, attention, and discretionary spending of our players versus other forms of online entertainment, including social media, reading, and other video games on the basis of a number of factors, including:

- quality of player experience,
- breadth and depth of gameplay,
- innovative game mechanics,
- ability to create or license compelling content,
- ability to invest in leading technology,
- game awareness and reputation, and
- access to distribution channels.

We believe these factors, among other things, enable us to compete favorably in the market. Our industry and the markets for our games, however, are highly competitive, rapidly evolving, fragmented, and subject to changing technology, shifting needs, and frequent introductions of new games, development platforms, and services. Successful execution of our strategy depends on our continuous ability to attract and retain players, expand the market for our games, maintain a technological edge, and offer new capabilities to players.

Many of our current and potential competitors enjoy substantial competitive advantages, such as greater name recognition, longer operating histories, greater financial, technical, and other resources, and, in some cases, the ability to rapidly combine online platforms with full-time and temporary employees. Internationally, local competitors may have greater recognition than us in their local country and a stronger understanding of local culture and commerce. They may also offer their products and services in local languages we do not offer.

Intellectual property

We rely on a combination of patent, copyright, trademark, and trade secret laws to protect our intellectual property rights. As of December 31, 2021, we have six registered patents in the United States, one pending patent application in Canada, 14 registered trademarks in the United States, five trademarks pending in the United States, and 75 registered trademarks in jurisdictions outside of the United States.

We also license a significant amount of the intellectual property that we use in our business from IGT pursuant to the IP License Agreement. We entered into the IP License Agreement with IGT on June 1, 2017, and it was subsequently amended on October 4, 2018 and May 30, 2020. Pursuant to the IP License Agreement, as amended, IGT has granted us an exclusive, perpetual and irrevocable license to license and distribute certain IGT social casino game titles in the social online game field of use launched before June 1, 2020. For each slot game first launched in the social online game field by DDI-US starting on June 1, 2020, the license from IGT is non-exclusive, perpetual and irrevocable. The IP License Agreement has an initial term of ten years, and may be renewed, if certain conditions are met, for two additional five-year periods. The IP License Agreement may be terminated by either us or IGT for cause. Pursuant to the IP License Agreement, as of December 31, 2021, we license from IGT approximately 320 slot gaming intellectual property rights that are actively offered to end users through our game titles.

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We entered into the DoubleU Games License Agreement on March 7, 2018, and it was subsequently amended on July 1, 2019 and November 27, 2019. Pursuant to the DoubleU Games License Agreement, DoubleU Games grants us an exclusive license to develop and distribute certain DoubleU Games social casino game titles and sequels thereto in the social online game field of use. Pursuant to the DoubleU Games License Agreement, as of December 31, 2021, we license approximately 44 game titles that are actively offered to end users. The exclusive license is subject to our payment of license fees. As amended to date, the agreement remains in effect until either DUG no longer holds an interest, directly or indirectly, in DDI, or DDI no longer holds an interest, directly or indirectly, in DDI-US. In such event, the agreement provides that the parties will mutually renegotiate the terms of the agreement.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our technology. In addition, third parties may initiate litigation against us alleging infringement of their proprietary rights or declaring their non-infringement of our intellectual property rights.

Regulation of the industry

We are subject to foreign and domestic laws and regulations that affect companies operating online, including over the internet and mobile networks, many of which are still evolving and could be interpreted in ways that could negatively impact our business, revenue, and results. Our social casino games, like many of those operated by our competitors, are not regulated under gambling or gaming laws. Certain jurisdictions, such as China, prohibit the operation of online social casino games completely within their country.

There is certain opposition in some jurisdictions to interactive online gaming, including social casino games. In September 2018, the World Health Organization added “gaming disorder” to the International Classification of Diseases, defining the disorder as a pattern of behavior characterized by impaired control over gaming and an increase in the priority of gaming over other interests and daily activities. Some states or countries have anti-gaming groups that specifically target social casino games. Such opposition could lead these jurisdictions to adopt legislation or impose a regulatory framework to govern interactive social gaming or social casino games specifically and which could require us to comply with stringent regulations and/or require us to modify our operations in order to so comply. These could result in a prohibition on interactive online gaming or social casino games altogether, restrict our ability to advertise our games, encourage our existing platform partners to restrict our ability to deploy our games through their media, or substantially increase our costs to comply with these regulations, all of which could have an adverse effect on our results of operations, cash flows, and financial condition. We cannot predict the likelihood, timing, scope, or terms of any such legislation or regulation or the extent to which they may affect our business.

On September 17, 2018, 15 international gambling regulators, plus the Washington State Gambling Commission, signed a declaration expressing concern “with the risks posed by the blurring of lines between gambling and other forms of digital entertainments such as video gaming,” including, among others, social casino gaming. The regulators committed to work together to analyze the characteristics of video games and social gaming and to engage in an informed dialogue with the video game and social gaming industries to ensure the appropriate and efficient implementation of applicable laws and regulations. The regulators also indicated they would work closely with their consumer protection enforcement agencies. We cannot predict the likelihood, timing, scope, or terms of any actions taken as a result of the declaration.

Consumer protection concerns regarding games such as ours have been raised in the past and may again be raised in the future. These concerns include (i) whether social casino games may be shown to serve as a gateway for adolescents to money gambling, and (ii) a concern that social casino gaming companies are using big data and advanced technology to predict and target “vulnerable” users who may spend significant time and money on social casino games in lieu of other activities. Such concerns could lead to increased scrutiny, including the potential imposition of a regulatory framework, over the manner in which our games are designed, developed, distributed, and presented. It is difficult for us to monitor and enforce age restrictions with respect to

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players who download or play our games, as we rely on third-party distribution platforms such as Apple App Store, Facebook, Google Play Store, and Amazon Appstore. We cannot predict the likelihood, timing, or scope of any concern reaching a level that will impact our business, or whether we would suffer any adverse impacts to our results of operations, cash flows, and financial condition.

In a recent case, the United States Court of Appeals for the Ninth Circuit decided that a social casino game produced by one of our competitors should be considered illegal gambling under Washington state law. Similar lawsuits have been filed against other defendants, including DDI-US. See “Item 8. Financial information—Consolidated statements and other financial information—Legal and administrative proceedings.”

Data privacy and security

We collect, process, store, use, and share data, some of which contains personal information. Consequently, our business is subject to a number of U.S. and international laws and regulations governing data privacy and security, including with respect to the collection, storage, use, transmission, sharing, and protection of personal information. Data privacy protection laws are rapidly changing and likely will continue to do so for the foreseeable future and may be inconsistent from jurisdiction to jurisdiction.

The European Union, or EU, has adopted strict data privacy and security regulations. The “GDPR”, effective May 2018, created new compliance obligations applicable to even non-EU businesses that offer their services to individuals located in the European Union. Companies that fail to comply with their GDPR obligations can face large financial penalties (including fines of up to four percent of global annual revenue for the preceding financial year or €20 million (whichever is higher) for the most serious violations).

In addition, rulings from the Court of Justice of the European Union (“CJEU”) may have a great impact on how companies subject to the GDPR process EU personal data. For example, in July 2020 the CJEU ruled that the EU—U.S. Privacy Shield certification was no longer a valid mechanism for transferring personal data from the European Union to the United States. We have taken appropriate steps to legitimize the transfer of such data that previously relied on EU—U.S. Privacy Shield certification.

In addition, the scope of data privacy regulations worldwide continues to evolve. New, increasingly restrictive regulations are coming into force all around the world, such as in Thailand and Brazil, but also within the United States. The California Consumer Privacy Act, or CCPA, became effective on January 1, 2020.

In short, the CCPA:

- provides California consumers with new rights—specifically the right to notice, access, deletion, and to opt-out of sales of their personal information,
- will affect several marketing activities due to the CCPA’s broad definitions of personal information and sale, and
- provides for private actions and permits for class action which could result in businesses being subject to substantial statutory fines in cases involving thousands of impacted consumers where the business is found to have failed to implement and maintain reasonable and appropriate security procedures.

The interpretation and practical implication of several provisions remain somewhat uncertain. Moreover, the California Privacy Rights Act, which was passed by ballot proposition in November 2020, amends the CCPA to provide even more expansive rights to California residents, and takes effect on January 1, 2023. It is clear that the effects of the CCPA/CPRA are significant and that they will require us to modify our data, security, and marketing practices and policies, and to incur substantial costs and expenses in an effort to comply with the CCPA and other applicable data protection laws.

In addition, there currently are a number of other proposals related to data privacy and security pending before several legislative and regulatory bodies. For example, the European Union is contemplating the adoption of the Regulation on Privacy and Electronic Communications (the “e-Privacy Regulation”). While this regulation was planned to take effect simultaneously with GDPR, it is currently still being debated and discussed by the EU member states. The e-Privacy Regulation focuses on the privacy of electronic communications and within that respect, it contains new rules for direct marketing activities. It is highly likely that these rules will lead to new consent requirements.

Due to the rapidly changing nature of these data privacy protection laws, there is not always clear guidance from the respective governments and regulators regarding the interpretation of the law, which may create the risk of an inadvertent violation. Efforts to comply with these and other data privacy and security restrictions that may be enacted could require us to modify our data processing practices and policies and to incorporate privacy by design into our games and website, as well as significantly increase the cost of our operations. Failure to comply with such restrictions could subject us to criminal and civil sanctions and other penalties. In part due to the uncertainty of the legal climate, complying with regulations, and any applicable rules or guidance from self-regulatory organizations relating to privacy, data protection, information security, and consumer protection, may result in substantial costs and may necessitate changes to our business practices, which may compromise our growth strategy, adversely affect our ability to attract or retain players, and otherwise adversely affect our business, financial condition, and operating results.

Any failure or perceived failure by us to comply with our posted privacy policies, our privacy-related obligations to players or other third parties, or any other legal obligations or regulatory requirements relating to privacy, data protection, or information security may result in governmental investigations or enforcement actions, litigation, claims, or public statements against us by consumer advocacy groups or others, and could result in significant liability, cause our players to lose trust in us, and otherwise materially and adversely affect our reputation and business. Furthermore, the costs of compliance with, and other burdens imposed by, the laws, regulations, and policies that are applicable to us may limit the adoption and use of, and reduce the overall demand for, our games.

Additionally, if third parties we work with violate applicable laws, regulations, or agreements, such violations may put our players’ data at risk, or result in governmental investigations or enforcement actions, fines, litigation, claims, or public statements against us by consumer advocacy groups or others, and could result in significant liability, cause our players to lose trust in us, and otherwise materially and adversely affect our reputation and business. Further, public scrutiny of, or complaints about, technology companies or their data handling or data protection practices, even if unrelated to our business, industry, or operations, may lead to increased scrutiny of technology companies, including us, and may cause government agencies to enact additional regulatory requirements or to modify their enforcement or investigation activities, which may increase our costs and risks.

As we offer our games worldwide, foreign jurisdictions may claim we are required to comply with local laws, including in jurisdictions where we have no local presence, offices, or other equipment. We are subject to a variety of laws in the United States and other non-U.S. jurisdictions, including laws regarding consumer protection, intellectual property, virtual items and currency, export, and national security, all of which are continuously evolving and developing. The scope and interpretation of the laws that are or may be applicable to us are often uncertain and may be conflicting, particularly laws outside the United States. It is also likely that as our business grows and evolves and our games are played in a greater number of countries, we will become subject to laws and regulations in additional jurisdictions. If we are not able to comply with these laws or regulations or if we become liable under these laws or regulations, we could be directly harmed, and we may be forced to implement new measures to reduce our exposure to this liability. This may require us to expend substantial resources, modify our games, or block users from a particular jurisdiction, each of which would harm our business, financial condition, and results of operations. In addition, the increased attention focused upon liability issues as a result of lawsuits and legislative proposals could harm our reputation or otherwise impact the

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growth of our business. Any costs incurred as a result of this potential liability could harm our business and operating results.

It is possible that a number of laws and regulations may be adopted or construed to apply to us in the United States, Korea, Europe, and elsewhere that could restrict the online and mobile industries, including player privacy, advertising, taxation, gaming, copyright, distribution, and antitrust. Furthermore, the growth and development of electronic commerce, social gaming, and virtual items and currency may lead to more stringent consumer protection laws that may impose additional burdens on or limitations on operations of companies such as ours conducting business through the internet and mobile devices. If scrutiny and regulation of our industry increase, we will be required to devote additional legal and other resources to addressing such regulation. For example, certain jurisdictions may seek to regulate social games. If a jurisdiction important to our business regulates social games, we would incur additional costs associated with compliance with such regulation, or depending on the nature of the regulation, we could be prohibited from providing social games in such jurisdiction altogether. Such new compliance costs or jurisdictional restrictions on our ability to offer social games could have a material adverse effect on our business, financial condition, and operating results.

Our employees

As of December 31, 2021, we had approximately 219 full-time employees worldwide, of whom approximately 147 are based in our Seoul facility and 72 are based in our Seattle facility. We have 174 employees dedicated to technology and content development, 34 in marketing, and 11 in general administration. We do not have any part-time employees nor do we have any unions or collective bargaining agreements with any of our employees.

C. Organizational Structure

Our principal operating subsidiaries as of December 31, 2021 are as follows:

<u>Legal Entity Name</u>	<u>Jurisdiction</u>	<u>Percentage Interest Held</u>
DoubleUDiamond, LLC	Delaware	100%
DoubleDown Interactive, LLC	Washington	100%
Double8 Games Co., Ltd.	Republic of Korea	100%

D. Property, Plants and Equipment

We currently lease two facilities located in Seoul, Korea, and Seattle, Washington, which comprise approximately 2,939 square meters and 49,375 square feet, respectively. The Seoul facility is our principal office, serving as our management headquarters and providing research and development activities. The Seattle facility serves as our center of research and development, human resources and administrative activities for the U.S. operations. We lease our principal office from DoubleU Games, and DDI-US leases the Seattle office from an independent third party. Our Seoul lease expires on September 30, 2023, but is renewable annually on the same terms unless express prior written notice of non-renewal is given by either party, providing us the flexibility to seek alternative facilities in light of prevailing market conditions. Our Seattle lease was originally entered into in July 2012 and expires on October 31, 2024. The terms of the Seattle lease provide for annual rent increases of \$49,375, or an increase of approximately 2.5% per year.

We believe our existing facilities are sufficient for our current needs. We may add new facilities or expand our existing facilities as we continue to add employees and expand into new markets. We expect that suitable additional space will be available to us as and when needed to accommodate our future growth.

ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with “Item 4. Information on the Company” of this annual report, and our consolidated financial statements and related notes thereto, included elsewhere in this annual report. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our current plans, expectations, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this annual report, particularly in the sections entitled “Item 3D. Risk Factors” and “Cautionary Note Regarding Forward-Looking Statements.”

Overview

We are a leading developer and publisher of digital games on mobile and web-based platforms. We are the creators of multi-format interactive entertainment experiences for casual players. Our flagship game, *DoubleDown Casino*, has been in the top 25 grossing mobile games annually on Apple App Store (iPhone) since 2016, according to *SensorTower*.

We have been an early pioneer in the social casino gaming segment and were among the initial publishers to launch a social casino game on the Facebook platform in 2010 with the release of *DoubleDown Casino*. As the market has shifted materially to mobile platforms in recent years, we have also embraced new distribution channels for our games, which has significantly expanded our overall reach and market opportunity. Our games attract players of social casino and casual games, and have been installed over 115 million times to date. During 2020 and 2021, an average of 2.9 million players and 2.4 million players, respectively, played our games each month. We believe that success in casual gaming requires a combination of creativity and data science to acquire, engage, and monetize players, and we have invested in our platform to build capabilities in game development and live game operations to capitalize on our opportunity.

All of our games are downloadable and playable for free on mobile platforms, and *DoubleDown Casino* is also available on web platforms. We designed our games to provide free virtual chips to players at various time intervals based on our players’ playing behaviors and patterns. We generate substantially all of our revenue from the sale of additional virtual chips, which players can choose to purchase at any time to enhance their playing experience. Our virtual chips cannot be withdrawn from the game, transferred from one game to another or from one player to another, or be redeemed for monetary value. We also generate a small portion of our revenue from our recently-launched subscription model, which allows subscribers to further enhance their gaming experience by gaining early access to new content and earning free virtual chips at a faster rate.

We have achieved consistent revenue growth and strong profitability. Our revenue was \$363.2 million in 2021, up from \$358.3 million in 2020. Our net income was \$78.1 million in 2021, up from \$53.6 million in 2020. Our Adjusted EBITDA was \$120.1 million in 2021, compared with \$120.3 million in 2020. See “Item 5. Operating and financial review and prospect—Other key performance indicators and non-GAAP metrics and trends” below for a description of Adjusted EBITDA and for a reconciliation to net income, the most directly comparable financial measure calculated in accordance with U.S. GAAP.

Recent developments

The global pandemic associated with COVID-19 has caused major disruption to all aspects of the global economy and societies in recent months, particularly as quarantine and stay-at-home orders have been imposed by all levels of government. We have followed guidance by the Korean government and the state government in Washington to protect our employees and our operations during the pandemic and have effectively implemented a remote environment for our business. To date, we have not incurred any interruptions in operations. We continuously monitor performance and other industry reports to assess the risk of future negative impacts should the disruption of the economy progress.

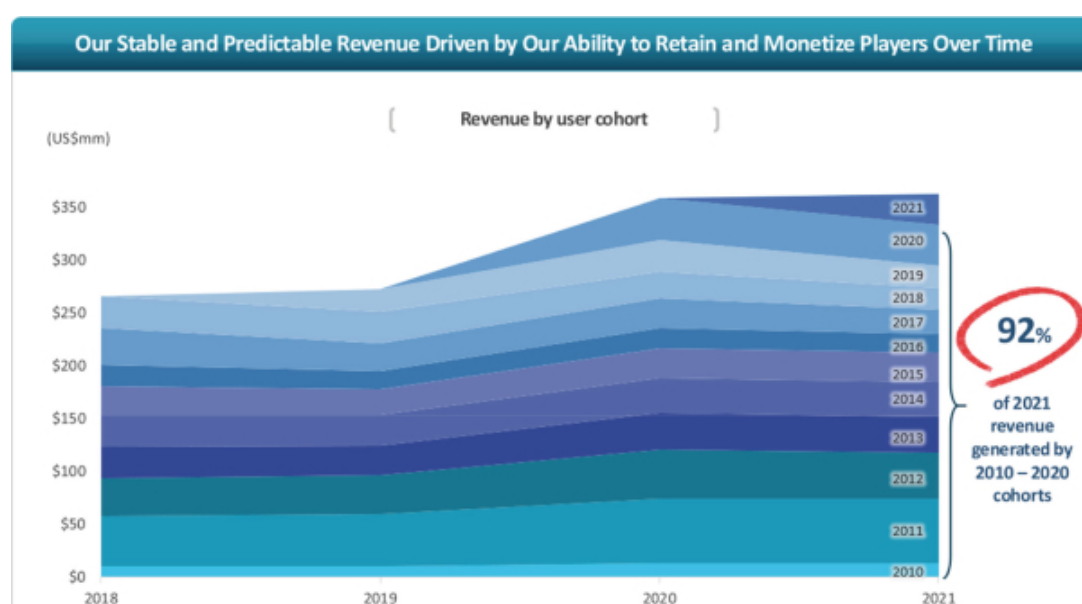
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The online gaming industry, in particular, has been identified in industry and media reports, such as *Eilers & Krejcik* and *AppsFlyer*, as an unintended beneficiary of this pandemic as people are quarantined in their homes, and we are not an exception to this benefit. Our monthly revenue benefited from the effects of the pandemic, particularly in those months when stay-at-home orders and quarantines were broadly imposed across the United States. However, we expect such benefit to decrease as vaccinations become more widely available and restrictions are eased. Consequently, any change resulting in a diversion of player discretionary income to other uses, including for essential items, could adversely impact our cash flows, operating results, and financial condition.

Our cohort dynamics

The success of our business model depends on our ability to acquire, retain and monetize players over time. We have a history of driving sustained monetization, or player spend, within our games. We measure this by tracking annual cohorts of players. We define an annual cohort as all of the game installs in a given year. We then track the total revenue amount of all players in each cohort over time. If a player installs a different game in two different years or the same game on two different devices, they may, in certain circumstances, be included in two different cohorts.

We believe that cohort behavior provides insight into the overall revenue retention dynamics of our business, reflecting our ability to convert players into paying players and drive monetization of our games over time. In 2021, 92% of our revenue was generated by installations prior to 2020. Our 2010 to 2020 cohorts experienced a 89% revenue retention in 2020, demonstrating our ability to consistently retain and monetize players. The chart below represents our quarterly gross player purchases by yearly installations subsequent to our acquisition by DUG in June 2017.



Our marketing efficiency

<u>Year ended December 31,</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>
DoubleDown Casino payback period (days)	123	138	162
New players contributing in payback period (%)	2.9	2.3	2.8

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We acquire players efficiently and at scale through organic and paid channels. We measure the effectiveness of our strategy using average payback period, whether they were acquired through organic or paid channels. We define average payback period as the amount of time it takes for the cumulative revenue generated by all of the players in a given install period to exceed the dollar amount spent on sales and marketing during the same install period. The payback periods shown are the number of days required to generate revenue equal to the cost of a new install for the stated cohort. As noted in the above table, this measurement of our marketing efficiency is based solely on results for *DoubleDown Casino*, which currently provides substantially all of our revenue.

Our payback period fluctuates based on our total cost of acquiring new players for a given period and our ability to subsequently monetize those players. In recent years, we have experienced decreases in our payback period as our monetization of players has increased, resulting in a corresponding decrease in the percentage of players required in a given cohort to account for cumulative revenues in the payback period. Following our acquisition by DUG in 2017, we have shifted more third-party marketing initiatives in-house and have made significant investments in modernizing our technology platform that have allowed us to improve our paid marketing efforts, better predict the monetization potential of new players, and monitor new player acquisition cost across marketing channels in real-time. We believe these investments position us to invest more resources in sales and marketing in the near-term while maintaining payback periods near the lower end of historical ranges. The new technology platform has also enabled us to improve monetization through dynamic and more targeted in-game offers, contributing to further reductions in the payback period. Our ability to effectively manage our new player acquisition cost, which represents fees paid to our marketing partners for new installs, is a key competitive advantage to our business.

Other key performance indicators and non-GAAP metrics and trends

In addition to the measures presented in our consolidated financial statements, we use the following key performance indicators and non-GAAP financial metrics to help us evaluate our business, identify trends affecting our business, formulate business plans, and make strategic decisions.

	Three months ended											
	December 31, 2021	September 30, 2021	June 30, 2021	March 31, 2021	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
Average MAU (000s)	2,433	2,447	2,544	2,647	2,704	2,894	3,083	3,004	2,791	2,844	2,779	2,873
Average DAU (000s)	1,022	1,033	1,057	1,082	1,131	1,169	1,239	1,195	1,168	1,154	1,169	1,221
Payer Conversion Rate (%)	5.5%	5.7%	5.8%	5.7%	5.5%	5.4%	5.4%	5.0%	5.0%	5.0%	5.3%	5.3%
ARPDau (\$) \$	0.97	0.96	0.99	0.99	0.87	0.86	0.89	0.70	0.64	0.64	0.64	0.62
Adjusted EBITDA (\$ in millions) ⁽¹⁾	\$ 25.8	\$ 30.2	\$ 31.1	\$ 33.1	\$ 29.7	\$ 28.9	\$ 36.3	\$ 25.4	\$ 27.0	\$ 24.8	\$ 25.1	\$ 24.8
Adjusted EBITDA margin (%) ⁽¹⁾	29.9%	34.7%	33.4%	34.2%	32.6%	31.4%	36.6%	33.4%	39.0%	36.5%	36.9%	36.3

(1) For a reconciliation of net income to Adjusted EBITDA, see “—Reconciliation of non-GAAP measures” below.

Average monthly active users (MAU)

We define Monthly Active Users, or MAU, as the average number of players who played one of our games in a particular month during the period presented. An individual who plays two different games or from two different devices may,

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in certain circumstances, be counted twice. However, we use third-party data and registration for our loyalty program to limit the occurrence of double counting. Average MAU for a period is the average of MAUs for each month for the period presented.

MAU is one key indicator of the scale of our player base and the potential number of paying players. Our MAU has fluctuated as we have reduced investment in our web platform and moderated our sales and marketing spend as we made investments to modernize our technology platform. We expect MAU to continue to fluctuate in the future, with the potential to increase in the near-term, as we adjust our sales and marketing spend, create new content in new and existing market segments, and invest in new games. We also expect external factors to further cause MAU to fluctuate, including market growth, shift to mobile comprising a larger portion of our active player base, and competition.

Average daily active users (DAU)

We define Daily Active Users, or DAU, as the average number of players who played one or more of our games on each day during the period presented. As with MAU, an individual who plays two different games or from two different devices may, in certain circumstances, be counted twice. Average DAU for a period is the average of the monthly average DAUs for the period presented. Our use of third-party data and registration for our loyalty program enables us to limit the occurrence of double counting. DAU is one key indicator of our ability to drive engagement of our player base. Our DAU has fluctuated over time in line with MAU trends.

Payer conversion rate

We define payer conversion rate as the percentage of MAU that made at least one purchase in a month during the same period. Payer conversion rate is a key indicator of our ability to monetize our active player base. Our payer conversion rate has remained relatively stable over time due to the ongoing engagement of our active players and the consistent introduction of new content and features into our games. Increases in payer conversion in recent periods have been primarily driven by increases in our mobile penetration.

Average revenue per daily active user (ARPDau)

We define ARPDau as quarterly revenue divided by quarterly average DAU. ARPDau is a key indicator of our ability to monetize our paying players. Our ARPDau has increased over time as we have increased our player engagement, payer conversion, and monetization of paying players. Increases in our monetization of paying players has been driven by several factors, including enhanced meta-features in our games, higher registration rates for our player loyalty program, greater variety of content across our games that appeals to a wider range of players, and significant investments in our technology platform that enables the release of new content more quickly and improves our live game operations capabilities.

Adjusted EBITDA

We define Adjusted EBITDA as operating income before interest expense, income tax expense, depreciation and amortization, foreign currency transaction and remeasurement gains and losses, and other income (expense), net (including interest income). Adjusted EBITDA margin is calculated by dividing Adjusted EBITDA for a period by revenue for the same period. Management has presented the performance measure Adjusted EBITDA because it monitors performance at a consolidated level and believes that this measure is relevant to an understanding of the Company's financial performance. In addition, we believe this metric provides useful information in understanding our operating performance and trends in our business. Adjusted EBITDA is not a defined performance measure in U.S. GAAP. The Company's definition of Adjusted EBITDA may not be comparable with similarly titled performance measures and disclosures by other entities. For a reconciliation of Adjusted EBITDA to net income, see "—Reconciliation of non-GAAP measures" below.

Key factors affecting our performance

Monetizing our active players

While our games are free-to-play, we generate substantially all of our revenue from players' purchases of in-game virtual chips. Our financial performance will be dependent on our ability to increase monetization of existing paying players and our effectiveness in converting more active players to paying players. Our players' willingness to pay for the virtual chips is driven by our ability to deliver engaging content and meta-features combined with our sales and marketing strategies. Our subscription model is designed to further improve our monetization of active players.

Sustaining and growing our player network

Establishing and maintaining a loyal network of players is vital for our business as the size of the network determines our maximum addressable audience for engagement and purchase of virtual chips. In order to grow our player network, we will spend on sales and marketing across various user acquisition channels and invest in content development to attract and engage players. In the near-term, as the market backdrop for user acquisition channels continues to be favorable, we may increase spend on sales and marketing as a percentage of revenue to grow our player network. The scale of our player network is determined by a number of factors, including our ability to strengthen player engagement by producing content that players play regularly and our effectiveness in acquiring new players, both of which may in turn affect our financial performance.

Strategic relationships with DUG and IGT

We have access to over 2,000 slot titles from DUG and IGT in addition to our self-developed titles. Our parent company, DUG, has expertise in developing social casino games, which are available to us on an exclusive basis. We have a long-term relationship with IGT, which includes access to IGT's library of highly recognizable authentic land-based content. Slot titles that we license from DUG and IGT generally require ongoing royalty payments. Our strategic relationships with DUG and IGT also allow for valuable knowledge sharing across numerous aspects of our operations. Our financial results may be affected by our relationship with DUG and IGT and our ability to create self-developed titles.

International growth and expansion

We currently generate most of our revenue from the United States, though we plan to expand our reach internationally over time, particularly in Asia-Pacific and Western Europe. Our international expansion will require us to devote additional resources to marketing, user acquisition, and localization of content. Our financial performance may be impacted by our geographic expansion initiatives.

Investments in our technology platform

As we further develop the content and features for our games, we plan to continue investing in technology infrastructure. A robust technology platform will enable us to further scale our business and improve the efficiency of our operations. A powerful technology platform also allows for more agile product development and optimized live game operations, which further supports our growth. Continued investment in our technology platform may affect our financial performance.

Relationships with third-party distribution platforms

We derive nearly all of our revenue from the sale of our virtual chips through third-party distribution platforms such as Apple App Store, Facebook, Google Play Store, and Amazon Appstore. These platforms have policies that may impact our reachability to our potential audience. Apple, Facebook, Google, and Amazon have discretion to amend their terms of service which might affect our current operations and in turn impact our financial performance. As we expand to new markets, we anticipate similar relationships with additional distribution partners that could similarly impact our performance.

Summarized consolidated results

Revenue

We generate substantially all of our revenue from the sale of in-game virtual chips, which players of our games can use to enhance their game-playing experience. We also generate a small portion of our revenue from our recently-launched subscription model, which offers early access to new slot contents and daily bonus virtual chips to certain of our *DoubleDown Fort Knox* users for a monthly subscription fee. Purchases of virtual chips by individual players are made on mobile and web-based platforms, such as the Apple, Facebook, Google, and Amazon platforms. These platforms typically charge us a fixed percentage fee for their payment processing and other services, and remit payments to us net of their fees. We recognize revenue on a gross basis for amounts we charge to players and record a corresponding cost of revenue for the amount paid to our platform partners.

Operating expenses

Operating expenses consist primarily of cost of revenue, sales and marketing expenses, research and development expenses, general and administrative expenses, and depreciation and amortization, each as more fully described below.

Cost of revenue

Cost of revenue includes payment processing fees, royalties, customer service, and hosting fees. Platform providers (such as Apple, Facebook, Google, and Amazon) charge a transactional payment processing fee to accept payments from our players for in-app consumable virtual goods purchased. Royalty fees are incurred and paid in accordance with the license agreements of the applicable intellectual property. Customer service consists of salaries, bonuses, benefits, and general and administrative expenses incurred to operate this service to our players. Depreciation and amortization expenses are excluded from cost of revenue and are separately presented on the consolidated statements of income and comprehensive income.

We expect cost of revenue to fluctuate proportionately with revenue; however, such proportionality may fluctuate as a percentage of revenue depending on our mix of games with royalty-bearing content.

Sales and marketing

Sales and marketing consists of costs related to advertising, player acquisition, engagement and retention, including costs related to salaries, bonuses, benefits, severance payments, and other compensation.

We plan to continue to invest in sales and marketing to retain and acquire users. However, sales and marketing expenses may fluctuate as a percentage of revenue depending on the timing and efficiency of our performance marketing.

Research and development

Research and development, or R&D, consists of salaries, bonuses, benefits, severance payments, and other compensation related to engineering, research, maintenance, development, and ongoing technical support.

We expect R&D expenses will increase in absolute dollars as our business expands and as we increase our personnel headcount to support the expected growth in our technical development and operating activities.

General and administrative

General and administrative consists of salaries, bonuses, benefits, severance payments, and other compensation for all our corporate support functional areas including our executives. In addition, general and

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administrative expenses include outsourced professional services such as consulting, legal and accounting services, taxes and dues, insurance premiums, as well as costs associated with maintaining our property and infrastructure.

We expect general and administrative expenses will increase in absolute dollars due to the additional administrative and regulatory burden of being a public reporting company.

Depreciation and amortization

Depreciation and amortization expenses primarily relate to the amortization of identifiable intangible assets, such as technology development, game development, software, and customer relationships, associated with our acquisition of DDI-US in 2017. For the game development we acquired as part of our acquisition of DDI-US, the costs incurred up to initial launch, that are directly attributable to the design and testing of such games, are capitalized and recorded as intangible assets, and amortized as depreciation and amortization expenses over a period of 36 months. Depreciation expense also includes the depreciation of property and equipment, each of which is computed using the straight-line method based on the depreciable amount of the assets over their respective useful lives.

Other income and other expenses

Our other income consists of interest revenues earned on our cash and cash equivalents, gains on foreign currency transactions, and gains on foreign currency remeasurement of intercompany item.

Our other expenses consist primarily of interest expense, driven primarily by the 4.6% Senior Notes due to a related party with an aggregate principal amount of KRW100 billion (US\$84 million) at inception. The 4.6% Senior Notes accrue 4.60% interest quarterly on the outstanding principal amount until maturity. Interest and principal are due in full at maturity date on May 27, 2024. Voluntary principal and interest payments were made in June and September 2020. Principal of KRW20 billion (US\$17 million) and interest of KRW1.2 billion (US\$1.1 million) was paid in June 2020 and principal of KRW30 billion (US\$25 million) and interest of KRW3.1 billion (US\$2.7 million) was paid in September 2020.

Income tax expense

Income tax expense consists of current income taxes in the various jurisdictions where we are subject to taxation, primarily the United States, as well as deferred income taxes and changes in the related assessment of the recoverability of deferred tax assets reflecting the net tax effects of temporary differences between the carrying amounts of assets and liabilities in each of these jurisdictions for financial reporting purposes and the amounts used for income tax purposes. Under current U.S. tax law, the federal statutory tax rate applicable to corporations is 21%. Our operations in Korea do not report income taxes as we have sufficient net operating loss carryforwards for local tax purposes. Our annual effective tax rate fluctuates based on our financial results, as well as the product mix and geographic breakdown of operations and sales. Additionally, future effective tax rates are subject to the tax regimes in which we operate remaining consistent with their current arrangements.

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A. Operating Results

Summarized consolidated results of operations

(\$ in millions)	Year ended December 31,			Change			
	2021	2020	2019	2021 vs. 2020		2020 vs. 2019	
Revenue	\$363.2	\$358.3	\$273.6	\$ 4.9	1.4%	\$84.7	31.0%
Operating expenses	\$264.5	\$269.6	\$205.3	\$ (5.1)	(1.9)%	\$64.3	31.3%
Operating income	\$ 98.7	\$ 88.7	\$ 68.3	\$10.0	11.3%	\$20.4	29.9%
Net income	\$ 78.1	\$ 53.6	\$ 36.3	\$24.5	45.7%	\$17.3	47.7%
Adjusted EBITDA ⁽¹⁾	\$120.1	\$120.3	\$101.7	\$ (0.2)	(0.2)%	\$18.6	18.3%
Operating margin	27.2%	24.8%	25.0%	2.4pp	nm	(0.2)pp	nm
Adjusted EBITDA margin ⁽¹⁾	33.1%	33.6%	37.2%	(0.5)pp	nm	(3.6)pp	nm

(1) For reconciliation of net income to Adjusted EBITDA, see “—Reconciliation of non-GAAP measures” below.

nm=not meaningful.

pp=percentage points.

Reconciliation of non-GAAP measures (in millions, except percentages)	Year ended December 31,		
	2021	2020	2019
Net income	\$ 78.1	\$ 53.6	\$ 36.3
Income tax expense	22.5	21.6	13.5
Income before tax	100.6	75.2	49.8
Adjustments for:			
Depreciation and amortization	17.9	31.6	33.4
Loss Contingency	3.5	—	—
Interest expense	2.0	10.8	26.6
Foreign currency transaction/remeasurement (gain) loss	(3.0)	(2.1)	(7.3)
Other income (expense), net	(0.9)	4.8	(0.8)
Adjusted EBITDA	\$120.1	\$120.3	\$101.7
Adjusted EBITDA margin	33.1%	33.6%	37.2%

Year ended December 31, 2021 compared to year ended December 31, 2020

Revenue and key performance indicators

(\$ in millions)	Year ended December 31,		Change	
	2021	2020	2021 vs 2020	
Revenue				
Mobile	\$264.9	\$257.4	\$ 7.5	2.9%
Web	98.3	100.9	\$(2.6)	(2.6)%
Total revenue	\$363.2	\$358.3	\$ 4.9	1.4%

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Revenue information by geography⁽¹⁾

(\$ in millions)	Year ended December 31,		Change	
	2021	2020	2021 vs 2020	
Revenue				
US ⁽¹⁾	\$317.6	\$309.2	\$ 8.4	2.7%
International	45.6	49.1	\$(3.5)	(7.1)%
Total revenue	\$363.2	\$358.3	\$ 4.9	1.4%

(1) Revenue by geography is an estimate based on available information. When location data cannot be validated, the location is assumed to be in the United States.

Key performance indicators

(in millions, except ARPDAU and percentage)	Year ended December 31,		Change	
	2021	2020	2021 vs 2020	
Key performance indicator				
Mobile penetration	72.9%	71.8%	1.1pp	1.5%
Average MAU	2.4	2.9	(0.5)	(17.2)%
Average DAU	1.0	1.2	(0.2)	(16.7)%
ARPDAU	\$0.97	\$0.83	\$0.14	16.9%

nm=not meaningful.

pp=percentage points.

Our revenue increased by 1.4% from \$358.3 million in 2020 to \$363.2 million in 2021, primarily due to our continued efforts to monetize our players, product feature improvements, a positive return on our user acquisition advertising business strategy and benefits from the effect of the COVID-19 pandemic. During 2021, COVID-19 pandemic restrictions remained in effect; however, we are unable to quantify the specific positive impact on revenues resulting therefrom.

Approximately 72.9% of our revenue was attributable to players on mobile platforms in 2021 compared with 71.8% in 2020, representing an increase of 1.1 percentage points. The increase in mobile penetration for the year ended December 31, 2020 and for the year ended December 31, 2021 was related to our strength in mobile user acquisition and game content that optimizes the experience for the mobile user and the continued shift in players migrating from web to mobile platforms to play our games.

Average MAU decreased 17.2% for the year ended December 31, 2021 compared to 2020.

While MAU and DAU are indicators of the scale of our player base and the potential number of paying players, we consider these metrics to be more reflective of the Company's decisions on how to allocate marketing spend and less significant to our revenue than the total amount that paying users spend. We review and assess the impact of our marketing spend, in particular, on these metrics and makes adjustments as we consider necessary to grow total revenue.

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Other metrics

	Year ended December 31,		Change	
	2021	2020	2021vs 2020	
Average MPUs (in thousands) ⁽¹⁾	139	156	(17)	(10.9)%
Average monthly revenue per payer ⁽²⁾	\$218	\$191	\$ 27	14.1%
Payer conversion rate	5.7%	5.4%	0.3pp	5.2%

- (1) We define Average MPUs as the average number of players who made a purchase at least once in a month during the applicable time period. However, as with our calculation of average MAU, an individual who plays two different games or from two different devices may, in certain circumstances be counted as multiple MPUs. We use third-party data and registration for our loyalty program to assist us in the limiting occurrences of multiple-counting.
- (2) Average monthly revenue per payer is calculated by dividing the average monthly revenue for the period by the Average MPUs in that period.
nm=not meaningful.
pp=percentage points

In addition to the key performance indicators noted above, we also monitor the number of players who make a purchase to assess any periodic changes in behavior and associated trends.

For the year ended December 31, 2021, Average MPU decreased 10.9% and average monthly revenue per payer increased 14.1% when compared to December 31, 2020, with our payer conversion rate increasing 0.3 percentage point for the comparative period. Our average monthly revenue per payer increased due to the decrease in Average MPU which contributed to the increase in average monthly revenue per payer. The average monthly revenue per payer benefited from an increase in playing time attributable, in part, to our enhanced meta-features and in-game content released during 2021 and other benefits of the COVID-19 pandemic during 2021.

Operating expenses

Cost of revenue

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2021	2020	2021 vs. 2020		2021	2020	2021 vs. 2020 change
Cost of revenue⁽¹⁾							
Platform	\$108.0	\$107.0	\$ 1.0	0.9%	29.7%	29.9%	(0.2)pp
Data center	2.4	1.9	0.5	26.3%	0.7%	0.5%	0.2pp
Royalty	15.5	16.4	(0.9)	(5.5)%	4.3%	4.6%	(0.3)pp
Customer service	0.7	1.0	(0.3)	(30.0)%	0.2%	0.2%	nm
Total cost of revenue	\$126.6	\$126.3	\$ 0.3	0.2%	34.9%	35.2%	(0.3)pp

- (1) Excluding depreciation and amortization.
nm=not meaningful.
pp=percentage points.

Cost of revenue increased by 0.2% from \$126.3 million in 2020 to \$126.6 million in 2021, primarily as a result of increased platform fees that generally correspond with an increase in revenues. Cost of revenue as a percentage of revenue decreased by 0.3 percentage point from 35.2% in 2020 to 34.9% in 2021, due to the success of our internally developed original slot games resulting in lowered royalties and improved technology efficiencies.

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Sales and marketing

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2021	2020	2021 vs. 2020		2021	2020	2021 vs. 2020 change
Sales and marketing ⁽¹⁾	\$78.8	\$71.2	\$7.6	10.7%	21.7%	19.9%	1.8pp

(1) Excluding depreciation and amortization.
pp=percentage points.

Sales and marketing expenses increased by 10.7% from \$71.2 million in 2020 to \$78.8 million in 2021, primarily due to an increase in user acquisition advertising spend. Total user acquisition advertising costs in 2020 was \$61.8 million, representing 17.3% of revenue in 2020, and was \$74.2 million in 2021, representing 20.4% of revenue in 2021, and an increase of 3.2 percentage points from 2020. Total sales and marketing expenses as a percentage of revenue increased by 1.8 percentage points from 19.9% in 2020 to 21.7% in 2021.

Research and development

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2021	2020	2021 vs. 2020		2021	2020	2021 vs. 2020 change
Research and development ⁽¹⁾	\$18.5	\$18.8	\$(0.3)	(1.6)%	5.1%	5.2%	(0.1)pp

(1) Excluding depreciation and amortization.
pp=percentage points.

Research and development expenses decreased by 1.6% from \$18.8 million in 2020 to \$18.5 million in 2021, due to the elimination of outsourced research and development costs with all other research and development related expenses remaining stable. Research and development as a percentage of revenue decreased by 0.1 percentage point from 5.2% in 2020 to 5.1% in 2021.

General and administrative

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2021	2020	2021 vs. 2020		2021	2020	2021 vs. 2020 change
General and administrative ⁽¹⁾	\$22.6	\$21.7	\$0.9	4.1%	6.2%	6.1%	0.1pp

(1) Excluding depreciation and amortization.
pp=percentage points.

General and administrative expenses increased by 4.1% from \$21.7 million in 2020 to \$22.6 million in 2021, due to an increase in administrative, professional, and outside services, including legal fees. General and administrative expenses as a percentage of revenue increased by 0.1 percentage point from 6.1% in 2020 to 6.2% in 2021.

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Depreciation and amortization

(\$ in millions)	Year ended December 31,		Change	
	2021	2020	2021 vs. 2020	
Depreciation and amortization	\$17.9	\$31.6	\$(13.7)	(43.4)%

Depreciation and amortization decreased by 43.4% from \$31.6 million in 2020 to \$17.9 million in 2021, primarily resulting from the completed amortization of certain identifiable intangible assets.

Other income and other expenses

(\$ in millions)	Year ended December 31,		Change	
	2021	2020	2021 vs. 2020	
Other income				
Gain on foreign currency transaction	\$ 1.1	\$ 2.3	\$ (1.2)	(52.2)%
Gain on foreign currency remeasurement of intercompany item	1.9	(0.2)	2.1	(1050)%
Interest income	0.2	0.2	—	(0.0)%
Miscellaneous income	0.7	nm	0.7	(100.0)%
Total other income	\$ 3.9	\$ 2.3	\$ 1.6	(69.6)%
Other expenses				
Interest expense	\$ 2.0	\$ 10.8	\$ (8.8)	(81.5)%
Miscellaneous expenses	nm	5.0	(5.0)	(100.0)%
Total other expenses	\$ 2.0	\$ 15.8	\$(13.8)	(87.4)%
Total other income/(expense), net	\$ 1.9	\$(13.5)	\$ 15.4	(114.1)%

nm=not meaningful.

Other income/expenses decreased 114.1% from \$13.5 million recognized as expenses in 2020 to \$1.9 million recognized as income in 2021, primarily due to a reduction in interest and miscellaneous expenses. Interest expense decreased due to the full repayment of all amounts owed on our 3.50% Senior Note. See “—Liquidity and capital resources—Short-term and long-term borrowings” below.

Income tax expense

(\$ in millions)	Year ended December 31,		Change	
	2021	2020	2021 vs. 2020	
Income tax expense	\$22.5	\$21.6	\$0.9	4.2%

Income tax expense increased by 4.2% from \$21.6 million in 2020 to \$22.5 million in 2021, primarily due to an increase in taxable income primarily related to our revenue growth. Our effective income tax rate of 22.3% and 28.6% for the year ended 2021 and 2020, respectively, differed from our statutory tax rate of 20.0% primarily due to foreign rate differential, withholding taxes offset by tax credits, and an increase in the valuation allowance on Korean deferred tax assets.

For further information regarding our income tax expenses, see Note 6 to our audited consolidated financial statements appearing elsewhere in this annual report.

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Net income

Net income increased by 45.7%, or \$24.5 million, from \$53.6 million in 2020 to \$78.1 million in 2021, primarily due to our revenue increase of \$4.9 million and a decrease in both our miscellaneous and interest expenses by \$5.1 million and \$8.8 million, respectively. Our operating margin increased by 2.4 percentage points, from 24.8% in 2020 to 27.2% in 2021.

Adjusted EBITDA

Adjusted EBITDA decreased by 0.2% from \$120.3 million in 2020 to \$120.1 million in 2021, primarily due to our increase in operating expenses. Adjusted EBITDA margin decreased from 33.6% in 2020 to 33.1% in 2021 primarily due to an increase in sales and marketing expenses.

For a reconciliation of net income to Adjusted EBITDA, see “—Reconciliation of non-GAAP measures” above.

Year ended December 31, 2020 compared to year ended December 31, 2019

Revenue and key performance indicators

(\$ in millions)	Year ended December 31,		Change	
	2020	2019	2020 vs 2019	
Revenue				
Mobile	\$257.4	\$184.7	\$72.7	39.4%
Web	100.9	88.9	\$12.0	13.5%
Total revenue	\$358.3	\$273.6	\$84.7	31.0%

Revenue information by geography⁽¹⁾

(\$ in millions)	Year ended December 31,		Change	
	2020	2019	2020 vs 2019	
Revenue				
US ⁽¹⁾	\$309.2	\$237.7	\$71.5	30.1%
International	49.1	35.9	\$13.2	36.8%
Total revenue	\$358.3	\$273.6	\$84.7	31.0%

(1) Revenue by geography is an estimate based on available information. When location data cannot be validated, the location is assumed to be in the United States.

Key performance indicators

(in millions, except ARPDau and percentage)	Year ended December 31,		Change	
	2020	2019	2020 vs 2019	
Key performance indicator				
Mobile penetration	71.8%	67.5%	4.3pp	6.4%
Average MAU	2.9	2.8	0.1	3.6%
Average DAU	1.2	1.2	0	0.0%
ARPDau	\$0.83	\$0.64	\$ 0.19	29.7%

nm=not meaningful.
pp=percentage points.

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Our revenue increased by 31.0% from \$273.6 million in 2019 to \$358.3 million in 2020, primarily due to our continued efforts to monetize our players, product feature improvements, a positive return on our user acquisition advertising business strategy and benefits from the effect of the COVID-19 pandemic. During 2020, COVID-19 pandemic stay-at-home orders and other restrictions were in effect from time to time; however, we are unable to quantify the specific positive impact on revenues resulting therefrom.

Approximately 71.8% of our revenue was attributable to players on mobile platforms in 2020 compared with 67.5% in 2019, an increase of 4.3 percentage points. The increase in mobile penetration for the year ended December 31, 2019 and for the year ended December 31, 2020 was related to our strength in mobile user acquisition and game content that optimizes the experience for the mobile user and the continued shift in players migrating from web to mobile platforms to play our games.

Average MAU increased 3.6% for the year ended December 31, 2020 compared to 2019.

While MAU and DAU are indicators of the scale of our player base and the potential number of paying players, we consider these metrics to be more reflective of the Company's decisions on how to allocate marketing spend and less significant to our revenue than the total amount that paying users spend. We review and assess the impact of our marketing spend, in particular, on these metrics and makes adjustments as we consider necessary to grow total revenue.

Other metrics

	Year ended December 31,		Change	
	2020	2019	2020 vs 2019	
Average MPUs (in thousands) ⁽¹⁾	156	146	10	6.8%
Average monthly revenue per payer ⁽²⁾	\$191	\$156	\$ 35	22.5%
Payer conversion rate	5.4%	5.2%	0.2pp	3.8%

(1) We define Average MPUs as the average number of players who made a purchase at least once in a month during the applicable time period. However, as with our calculation of average MAU, an individual who plays two different games or from two different devices may, in certain circumstances be counted as multiple MPUs. We use third-party data and registration for our loyalty program to assist us in the limiting occurrences of multiple-counting.

(2) Average monthly revenue per payer is calculated by dividing the average monthly revenue for the period by the Average MPUs in that period.
nm=not meaningful.
pp=percentage points

In addition to the key performance indicators noted above, we also monitor the number of players who make a purchase to assess any periodic changes in behavior and associated trends.

For the year ended December 31, 2020, Average MPU increased 6.8% and average monthly revenue per payer increased 22.5% when compared to December 31, 2019, with our payer conversion rate increasing 0.2 percentage point for the comparative period. Our average monthly revenue per payer increased due to the increase in Average MPU which contributed to the increase in average monthly revenue per payer. The average monthly revenue per payer benefited from an increase in playing time attributable, in part, to our enhanced meta-features and in-game content released during 2020 and other benefits of the COVID-19 pandemic during 2020.

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Operating expenses

Cost of revenue

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2020	2019	2020 vs. 2019		2020	2019	2020 vs. 2019 change
Cost of revenue⁽¹⁾							
Platform	\$107.0	\$81.3	\$25.7	31.6%	29.9%	29.7%	0.2pp
Data center	1.9	1.8	0.1	5.6%	0.5%	0.7%	(0.2)pp
Royalty	16.4	15.5	0.9	5.8%	4.6%	5.7%	(1.1)pp
Customer service	1.0	1.0	0	0.0%	0.2%	0.4%	(0.2)pp
Total cost of revenue	\$126.3	\$99.6	\$26.7	26.8%	35.2%	36.4%	(1.2)pp

(1) Excluding depreciation and amortization.

nm=not meaningful.

pp=percentage points.

Cost of revenue increased by 26.8% from \$99.6 million in 2019 to \$126.3 million in 2020, primarily as a result of increased platform fees that generally correspond with an increase in revenues. Cost of revenue as a percentage of revenue decreased by 1.2 percentage points from 36.4% in 2019 to 35.2% in 2020, due to the success of our internally developed original slot games resulting in lowered royalties and improved technology efficiencies.

Sales and marketing

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2020	2019	2020 vs. 2019		2020	2019	2020 vs. 2019 change
Sales and marketing ⁽¹⁾	\$71.2	\$35.8	\$35.4	98.9%	19.9%	13.1%	6.8pp

(1) Excluding depreciation and amortization.

pp=percentage points.

Sales and marketing expenses increased by 98.9% from \$35.8 million in 2019 to \$71.2 million in 2020, primarily due to an increase in user acquisition advertising spend. Total user acquisition advertising costs in 2019 was \$28.5 million, representing 10.4% of revenue in 2019, and was \$61.8 million in 2020, representing 17.3% of revenue in 2020, and an increase of 6.9 percentage points from 2019. Total sales and marketing expenses as a percentage of revenue increased by 6.8 percentage points from 13.1% in 2019 to 19.9% in 2020.

Research and development

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2020	2019	2020 vs. 2019		2020	2019	2020 vs. 2019 change
Research and development ⁽¹⁾	\$18.8	\$19.3	\$(0.5)	(2.6)%	5.2%	7.0%	(1.8)pp

(1) Excluding depreciation and amortization.

pp=percentage points.

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Research and development expenses decreased by 2.6% from \$19.3 million in 2019 to \$18.8 million in 2020, due to the elimination of outsourced research and development costs with all other research and development related expenses remaining flat. Research and development as a percentage of revenue decreased by 1.8 percentage points from 7.0% in 2019 to 5.2% in 2020.

General and administrative

(\$ in millions)	Year ended December 31,		Change		Percentage of revenue		
	2020	2019	2020 vs. 2019		2020	2019	2020 vs. 2019 change
General and administrative ⁽¹⁾	\$21.7	\$17.2	\$4.5	26.2%	6.1%	6.3%	(0.2)pp

(1) Excluding depreciation and amortization.
pp=percentage points.

General and administrative expenses increased by 26.2% from \$17.2 million in 2019 to \$21.7 million in 2020, due to an increase in administrative, professional, and outside services, including legal fees. General and administrative expenses as a percentage of revenue decreased by 0.2 percentage points from 6.3% in 2019 to 6.1% in 2020.

Depreciation and amortization

(\$ in millions)	Year ended December 31,		Change	
	2020	2019	2020 vs. 2019	
Depreciation and amortization	\$31.6	\$33.4	\$(1.8)	(5.4)%

Depreciation and amortization decreased by 5.4% from \$33.4 million in 2019 to \$31.6 million in 2020, primarily resulting from the completed amortization of certain identifiable intangible assets.

Other income and other expenses

(\$ in millions)	Year ended December 31,		Change	
	2020	2019	2020 vs. 2019	
Other income				
Gain on foreign currency transaction	\$ 2.3	\$ 4.1	\$(1.8)	(43.9)%
Gain on foreign currency remeasurement of intercompany item	(0.2)	3.2	(3.4)	(106.3)%
Interest income	0.2	0.5	(0.3)	(60.0)%
Miscellaneous income	nm	0.3	(0.3)	(100.0)%
Total other income	\$ 2.3	\$ 8.1	\$(5.8)	(71.6)%
Other expenses				
Interest expense	\$ 10.8	\$ 26.6	\$(15.8)	(59.4)%
Miscellaneous expenses	5.0	nm	5.0	100.0%
Total other expenses	\$ 15.8	\$ 26.6	\$(10.8)	(40.6)%
Total other income/(expense), net	\$(13.5)	\$(18.5)	\$ 5.0	(27.0)%

nm=not meaningful.

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Other income/expenses decreased 27% from \$18.5 million in 2019 to \$13.5 million in 2020, primarily due to a reduction in interest expense and gain on foreign currency remeasurement, offset by gain on foreign currency transaction and gain on foreign currency remeasurement. Interest expense decreased due to the reduction in principal on our 3.50% Senior Note. See “—Liquidity and capital resources—Short-term and long-term borrowings” below. Gain on foreign currency remeasurement declined primarily due to the change in ending balances denominated in USD for intercompany item. Gain on foreign currency transaction decreased primarily due to unfavorability in the exchange rate for transactions denominated in USD at DDI.

Income tax expense

(\$ in millions)	Year ended December 31,		Change	
	2020	2019	2020 vs. 2019	
Income tax expense	\$21.6	\$13.5	\$8.1	60.0%

Income tax expense increased by 60.0% from \$13.5 million in 2019 to \$21.6 million in 2020, primarily due to an increase in taxable income primarily related to our revenue growth. Our effective income tax rate of 28.6% and 27.2% for the year ended 2020 and 2019, respectively, differed from our statutory tax rate of 20.0% primarily due to foreign rate differential, withholding taxes offset by tax credits, and an increase in the valuation allowance on Korean deferred tax assets.

For further information regarding our income tax expenses, see Note 6 to our audited consolidated financial statements appearing elsewhere in this annual report.

Net income

Net income increased by 47.7%, or \$17.3 million, from \$36.3 million in 2019 to \$53.6 million in 2020, primarily due to our revenue increase of \$84.7 million. Our operating margin decreased by 0.2 percentage points, from 25.0% in 2019 to 24.8% in 2020.

Adjusted EBITDA

Adjusted EBITDA increased by 18.3% from \$101.7 million in 2019 to \$120.3 million in 2020, primarily due to our increase in revenue and reduction in operating expenses. Adjusted EBITDA margin decreased from 37.2% in 2019 to 33.6% in 2020 primarily due to an increase in sales and marketing expenses.

For a reconciliation of net income to Adjusted EBITDA, see “—Reconciliation of non-GAAP measures” above.

B. Liquidity and Capital Resources

We have funded our operations primarily through cash flows from operating activities. We generated \$76.7 million, \$99.9 million and \$96.1 million of cash from operating activities for fiscal years ended December 31, 2019, 2020 and 2021, respectively. As of December 31, 2021, we had cash and cash equivalents of \$242.1 million. We manage our liquidity risk by maintaining adequate cash reserves and credit facilities, and by continuously monitoring our cash forecasts and actual cash flows, and by matching the maturity profiles of financial assets and liabilities. Based on our current plans and market conditions, we believe that cash flows generated from our operations and borrowing capacity under our current term loan will be sufficient to satisfy our anticipated cash requirements in the ordinary course of business for next 12 months. However, we intend to continue to make significant investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new games and features or enhance our existing games, improve our operating infrastructure, or acquire complementary businesses, personnel and technologies.

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As noted under “Item 8. Financial information—Consolidated statements and other financial information—Legal and administrative proceedings”, the outcome of the *Benson* litigation, whether through any settlement or damages award, could be material and in such circumstances, depending upon the amount, could require us to secure additional sources of funds to satisfy a material settlement or judgment. See Note 11 to the audited condensed consolidated financial statements for the years ended December 31, 2021, 2020 and 2019 on page F-22 for additional information. Accordingly, we may need to engage in equity or debt financings to secure additional funds. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be harmed.

Cash flows

The following table presents a summary of our cash flows for the periods indicated:

(\$ in millions)	Year ended December 31,		
	2021	2020	2019
Net cash flows provided by operating activities	\$ 96.1	\$ 99.9	\$ 76.7
Net cash flows used in investing activities	(1.8)	(2.2)	(0.2)
Net cash flows provided by / (used in) financing activities	86.0	(76.3)	(61.8)
Net foreign exchange difference	(1.4)	(0.6)	(3.2)
Net increase (decrease) in cash and cash equivalents	178.9	20.8	11.5
Cash and cash equivalents at the beginning of the period	63.2	42.4	30.9
Cash and cash equivalents at the end of the period	\$242.1	\$ 63.2	\$ 42.4

Operating activities

Net cash flows provided by operating activities decreased from \$99.9 million in 2020 to \$96.1 million in 2021, primarily due to an increase in user acquisition advertising spend.

Net cash flows provided by operating activities increased from \$76.7 million in 2019 to \$99.9 million in 2020, primarily due to growth from DoubleDown Casino and improvement of Adjusted EBITDA.

Investing activities

Net cash flows used in investing activities decreased from \$2.2 million in 2020 to \$1.8 million in 2021, primarily due to the acquisition of Double8 Games in February 2020.

Net cash flows used in investing activities increased from \$0.2 million in 2019 to \$2.2 million in 2020, primarily due to the acquisition of Double8 Games from DoubleU Games in February 2020.

Financing activities

Net cash flows provided by / (used in) financing activities increased from \$(76.3) million in 2020 to \$86.0 million in 2021, primarily due to the completion of our IPO in 2021.

Net cash flows used in financing activities increased from \$61.8 million in 2019 to \$76.3 million in 2020, primarily due to the payoff of our short-term senior note and payments made on our long-term borrowings with related party.

Short-term and long-term borrowings

In conjunction with our acquisition of DDI-US in 2017, a group of Korean lenders agreed to provide annual term senior secured credit facilities (the “2017 Senior Credit Facilities”) in an aggregate principal amount of KRW315 billion (US\$265.71 million), comprised of a senior revolving credit facility in the aggregate principal amount of KRW15 billion (US\$12.65 million) and a senior term loan facility in an aggregate principal amount of KRW300 billion (US\$253.06 million), pursuant to a credit agreement dated May 24, 2017, between us and the lenders thereto.

We refinanced the 2017 Senior Credit Facilities in 2018, and on May 24, 2019, we entered into a new credit agreement (the “3.50% Senior Note”) with KEB Hana Bank and National Fisheries Cooperative Association, as lenders, in the aggregate principal amount of KRW80 billion (US\$67.48 million), with a one-year term. The first withdrawal was made on May 27, 2019. The proceeds of the 3.50% Senior Note were used to provide funds to us for the repayment of the then outstanding balance on the refinanced 2017 Senior Credit Facilities. The 3.50% Senior Note provides for a fixed interest rate of 3.50% per annum, payable quarterly, commencing August 2019. A quarterly principal repayment of KRW20 billion (US\$16.87 million) is also required. On April 23, 2020, the 3.50% Senior Note was repaid in full.

In addition, DoubleU Games has extended three loans to us on May 25, 2018, August 27, 2018 and November 26, 2018 (collectively, the “4.6% Senior Notes”), and the aggregate outstanding principal amount as of December 31, 2021 was KRW50 billion US\$42.2 million. Each note matures on May 27, 2024, subject to the right of prepayment in whole or in part without a prepayment penalty, following repayment of all outstanding amounts under the 3.50% Senior Note and conversion or redemption of all of the Bonds described below and under “Item 7B. Related party transactions—Joint investment agreement—Equity-linked securities.” Each note has a fixed rate of interest at 4.6% per annum and accrues quarterly, commencing May 2019, and is not payable until maturity. The notes have a default interest rate of an additional 5.0% per annum.

Equity-linked securities. On May 26, 2017, we issued (i) an aggregate principal amount of KRW210 billion (US\$177.14 million) in 2.5% Convertible Bonds and (ii) an aggregate principal amount of KRW90 billion (US\$75.92 million) in 2.5% Non-convertible Bonds with warrants to STIC in connection with our acquisition from IGT. We collectively refer to the 2.5% Convertible Bonds and the 2.5% Non-convertible Bonds with warrants as the “Bonds.” The Bonds had a stated fixed coupon rate of 2.5% per annum, payable quarterly on the 25th day of February, May, August, and November, with a term of seven years (May 26, 2024), subject to a right of the third party to require redemption of the Bonds, in whole or in part, after five years (May 26, 2022). The conversion price of the convertible bonds, as well as the exercise price of the warrants, is KRW293,600 (US\$244.56) per common share, subject to certain adjustments for anti-dilution protection. See “Item 7B. Related party transactions—Joint investment agreement—Equity-linked securities.”

On May 15, 2020, DoubleU Games purchased the 2.5% Non-convertible Bonds with warrants from STIC and, in conjunction therewith, exercised the warrants by surrendering the 2.5% Non-convertible Bonds with warrants for 306,539 common shares at the exercise price of KRW293,600 (US\$244.56). On May 25, 2020, STIC converted 50.3% of the 2.5% Convertible Bonds into 360,000 common shares at the initial conversion price of KRW293,600 (US\$244.56). On June 4, 2020, STIC converted the remaining 2.5% Convertible Bonds into 355,258 common shares at the initial conversion price. See “Item 7B. Related party transactions—Bonds—2.5% convertible bonds.”

Material cash requirements from known contractual and other obligations

Our material cash requirements from known contractual and other obligations mainly consist of obligations under our operating leases. As of December 31, 2021, we expected to incur a total of \$8.2 million under our operating leases, consisting of \$3.3 million due within one year, and \$4.9 million due within two to three years.

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These amounts are associated with contracts that are enforceable and legally binding and that specify all significant terms and do not include obligations under agreements that we can cancel without a significant penalty.

Off-balance sheet arrangements

We did not have any off-balance sheet arrangements in 2021.

C. Research and Development, Patents and Licenses, etc.

For a discussion of our research and development policies for the last three years, see “Item 4B. Business overview.”

D. Trend Information

For a discussion of the most significant recent trends and material uncertainties and other events that are reasonably likely to have a material impact on the Company, see “Item 5A. Operating results” and “Item 5B. Liquidity and capital resources.”

E. Critical Accounting Estimates

Our significant accounting policies are set forth in Note 2 to our audited consolidated financial statements in Item 18 of this annual report. The preparation of our consolidated financial statements requires our management to make critical estimates and assumptions that affect the amounts reported in our consolidated financial statements. These estimates and assumptions are periodically re-evaluated by management and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Actual results may differ significantly from those estimates and assumptions.

We have identified the following accounting policies as the most critical to an understanding of our financial position and results of operations, because the application of these policies requires significant and complex management estimates, assumptions and judgments, and the reporting of materially different amounts could result if different estimates or assumptions were used or different judgments were made:

Revenue recognition

In May 2014, the Financial Accounting Standards Board (“FASB”) issued an Accounting Standards Update (“ASU”) amending revenue recognition guidance and requiring more detailed disclosures to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. We refer to this standard as ASC 606.

We adopted ASC 606 on January 1, 2018 for all revenue contracts with our customers using the modified retrospective approach. The adoption of ASC 606 had no impact on our consolidated financial statements other than incremental disclosures provided herein.

Our social and mobile apps operate on a free-to-play model, whereby game players may collect virtual currency free of charge through the passage of time or through targeted marketing promotions. If a game player wishes to obtain virtual currency above and beyond the level of free virtual currency available to that player, the player may purchase additional virtual currency. Once a purchase is completed, the virtual currency is deposited into the player’s account and is not separately identifiable from previously purchased virtual currency or virtual currency obtained by the game player for free.

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Once obtained, virtual currency (either free or purchased) cannot be redeemed for cash nor exchanged for anything other than gameplay within our apps. When virtual currency is played on any of our games, the game player could “win” and would be awarded additional virtual currency or could “lose” and lose the future use of that virtual currency. We have concluded that our virtual currency represents consumable goods, because the game player does not receive any additional benefit from the games and is not entitled to any additional rights once the virtual currency is substantially consumed.

Control transfers when the virtual currency is consumed for gameplay. We recognize revenue from player purchases of virtual currency based on the consumption of this currency. We determined through a review of play behavior that game players generally do not purchase additional virtual currency until their existing virtual currency balances have been substantially consumed.

Based on an analysis of customers’ historical play behavior, purchase behavior, and the amount of virtual currency outstanding, we are able to estimate the rate that virtual currency is consumed during gameplay. Accordingly, revenue is recognized using a user-based revenue model with the period between purchases representing the timing difference between virtual currency purchase and consumption. This timing difference is relatively short.

We continuously gather and analyze detailed customer play behavior and assess this data in relation to our judgments used for revenue recognition.

We generate a small portion of our revenue from subscription services. All monthly subscription fees are prepaid and non-refundable for a one-month period and auto-renew until the end customer terminates the service with the platform provider the subscription services originated. The subscription revenue is recognized on a daily basis beginning on the original date of purchase and has no impact on a customer purchased virtual currency.

Goodwill and indefinite-lived intangible assets

Goodwill consists of the excess of the purchase price over the fair value of identifiable assets acquired and liabilities assumed in a business combination. Our indefinite-lived intangible assets were acquired in a business combination and recorded at fair value.

We assess the carrying value of our goodwill and other indefinite-lived assets for potential impairment annually as of October 1, or more frequently if events or changes in circumstances indicate that the carrying value of the asset may not be recoverable.

When assessing goodwill for impairment, we may elect to first utilize a qualitative assessment to evaluate if a more detailed quantitative impairment test is necessary. An impairment charge is recorded based on the excess of the reporting unit’s carrying amount over its fair value. In determining fair value of our reporting unit in connection with our annual goodwill impairment test, we perform a blended analysis of the present value of future discounted cash flows and a market valuation approach. The discounted cash flows model indicates the fair value of the reporting unit based on the present value of the cash flows that we expect the reporting unit to generate in the future. The market valuation approach indicates the fair value of the business based on a comparison of the Company to comparable publicly traded firms in similar lines of business.

In determining fair value of indefinite-lived intangible assets for purposes of our annual impairment test, we use the relief-from-royalty method. This method assumes that the trade name and trademarks have value to the extent that their owner is relieved of the obligation to pay royalties for the benefits received from them. The amount of impairment of indefinite-lived intangible assets is measured by the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset. The excess of the estimated fair value over carrying value expressed as a percentage of carrying value for the respective reporting unit as of the annual testing date is approximately 30%. In order to evaluate the sensitivity of the fair value calculations used in the

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goodwill impairment test, we applied a hypothetical 10% decrease to the fair value of the reporting unit and compared those hypothetical values to the reporting unit carrying values. Based on this hypothetical 10% decrease, the excess of the estimated fair value over carrying value expressed as a percentage of carrying value for the respective reporting unit is approximately 15%.

If actual results are not consistent with management's estimates and assumptions, goodwill and other intangible assets may be overstated and a charge would need to be taken against net earnings which would adversely affect our financial statements. There have been no impairments of our indefinite-lived intangible assets or goodwill to date.

Finite-lived intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses.

Finite-lived intangible assets are amortized over their useful economic life and assessed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of these assets is determined by comparing the forecasted undiscounted net cash flows of the operating to which the assets relate to the carrying amount. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in estimates.

The amortization expense on intangible assets with finite lives is recognized in the statement of income and comprehensive income in depreciation and amortization.

A summary of the amortization period applied to the Company's finite-lived intangible assets is, as follows:

	<u>Useful life</u>
Purchased developed technology	5 years
Development costs	3 years
Software	4 years
Customer relationships	4 years

Development costs for new app development are capitalized and recognized as an intangible asset when the preliminary development stage has been completed, management commits to funding the project, it is probable that the project will be completed, and the software will be used for its intended function.

Following initial recognition of the development costs as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete, and the asset is available for use. It is amortized over the period of expected future benefit. Amortization is recorded in depreciation and amortization.

Legal Contingencies

The resolution of the *Benson* lawsuit, whether through the court or through settlement, could have a material adverse effect on our operating results and financial condition. As set out in Note 11 to the audited consolidated financial statements for the years ended December 31, 2021, 2020 and 2019 included in this Annual Report, the Company has recorded a charge to income for this litigation, which is included in general & administrative expenses. However, the Company may experience a loss in excess of the amount recorded, which could be material; the ultimate outcome cannot be known at this time due to the significant incomplete,

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uncertain, and unknown variables inherent with this stage of the pending litigation. The amount recorded represents management's estimate, in accordance with applicable accounting standards, of the low end of the reasonably possible range of loss of \$3.5 million to \$201.5 million. Management will continue to evaluate the reasonably possible range of loss and the amount recorded as the litigation proceeds over time, potentially resulting in a material adjustment thereto. Our operating results and financial condition could be materially adversely impacted by the resolutions of the *Benson* case. We continue to dispute any allegation of wrongdoing and we intend to continue our vigorous defense in this matter. There can be no guarantee that, in such an event, we will be able to recover all or any part of any damages award or, if applicable, settlement amount, or obtain a contribution with respect thereto, from any other defendant. Additionally, there can be no guarantee as to what, if any, additional modifications any judgments or settlements might impose on one or more of our games.

In the future, additional legal proceedings or regulatory investigations targeting our social casino games and claiming violations of state or federal laws could also occur in other states, based on the unique and particular laws of each jurisdiction. We could, in connection with any such proceedings or regulatory actions, including as a result of the *Benson* case, be restricted from operating social casino games in certain states, or be required to make modifications to the operation of one or more of our games, or have to pay significant damage awards or settlement amounts. We cannot predict the likelihood, timing, or scope of the consequences of such an outcome, or the outcome of any other legal proceedings to which we may be a party, any of which could have a material adverse effect on our results of operations, cash flows, or financial condition. For discussion of our legal proceedings, see "Item 3D. Risk factors—Legal proceedings may materially adversely affect our business and our results of operations, cash flows, and financial condition" and "Item 8. Financial information—Consolidated statements and other financial information—Legal and administrative proceedings."

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth information regarding members of our executive officers and our board of directors as of the date of this annual report. The business address for each of our executive directors and officers is 605 5th Avenue, Suite 300, Seattle, Washington 98104. The business address for Yanghoon Cho is 64, Yongyeon-ro, Nam-gu, Ulsan, Republic of Korea 44784. The business address for Jaesung Chung is 28, International Finance Center, 10, Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, Republic of Korea 07326.

<u>Name</u>	<u>Age</u>	<u>Position(s) with our Company</u>
In Keuk Kim	44	Chief Executive Officer; Director
Joseph A. Sigrist	61	Chief Financial Officer; Director
Haenam Kim	43	Chief Marketing Officer; Director
Ki Chul Kim	43	Chief Data Officer; Director
Yanghoon Cho	54	Independent Director
Jaesung Chung	63	Independent Director

Biographical Information

The following is a summary of certain biographical information concerning our executive officers, directors, and corporate auditors.

In Keuk Kim, Chief Executive Officer; Director. Mr. Kim has served as our Chief Executive Officer and a member of our board of directors since November 2019, and has served as the Chief Executive Officer of DUD since May 2017. He has been on the board of directors of DoubleU Games since 2013, serving initially as an outside director until April 2015, at which time he became an executive director and Chief Strategy Officer. Mr. Kim served as Chief Strategy Officer of DoubleU Games until October 2017. Mr. Kim has expertise in information technology, game business development, and strategic investments. While at DoubleU Games, Mr. Kim led the execution and acquisition of DoubleDown Interactive, LLC and investment in our Company. His

prior experience includes cloud computing development, proprietary trading, and corporate mergers and acquisitions. He received a Bachelor of Science in Computer Science from the Korea Advanced Institute of Science and Technology, or KAIST, in 2000.

Joseph A. Sigrist, Chief Financial Officer; Director. Mr. Sigrist has served as our Chief Financial Officer and a member of our board of directors since November 2019, and has served as Senior Vice-President and General Manager of DDI-US since April 2015. Prior to joining DDI-US, Mr. Sigrist served as Senior Vice-President, Global Product Development & Operations for IGT from 2012 until 2015, and he was responsible for several key product strategic planning and development functions. Previously, for over twenty years, Mr. Sigrist worked as an executive for a variety of technology companies, holding senior leadership roles in product management, product development, and general management, including at Avaya, Polycom and Lucent Technologies. He has expertise in the areas of leadership, business strategy, product planning, financial management, and corporate mergers and acquisitions. He earned his MBA from Santa Clara University in 1986 and a Bachelor of Science in Mechanical Engineering from Santa Clara University in 1983.

Haenam Kim, Chief Marketing Officer; Director. Ms. Kim has served as our Chief Marketing Officer and a member of our board of directors since November 2019 and has served as the Chief Operating Officer of DUD since November 2017. Previously, Ms. Kim served as Chief Operating Officer of our Company from May 2017 to November 2017. Prior to joining our Company, Ms. Kim held various positions in business consulting and software marketing, sales, and operations at IBM Korea since 2000. Most recently with IBM Korea, Ms. Kim held the position of Software Business Unit Sales Leader of IBM Collaboration and Talent Solutions from February 2017 to May 2017, where she developed the business unit's business strategy and plan, executed sales activities, and was responsible for sales and general administration for that unit. Ms. Kim was promoted to the position of Software Business Unit Sales Leader based on her prior experience as Software Digital Sales Leader from February 2014 to January 2017, where she led a sales team for analytics, cloud, security, social, and commerce in a commercial sales territory representing IBM customers plus white space customers. Ms. Kim received a Bachelor of Science in Industrial Engineering from KAIST in 2000.

Ki Chul Kim, Chief Data Officer; Director. Mr. Kim has served as our Chief Data Officer and a member of our board of directors since November 2019 and has served as the Chief Marketing Officer of DUD since May 2017. Mr. Kim joined the board of directors of DoubleU Games in 2013 and, from February 2015 until September 2017, served as an executive director and Chief Marketing Officer of DoubleU Games. Mr. Kim's experience as executive director and Chief Marketing Officer at DoubleU Games included management of the rapidly growing 50-member organization, overseeing the marketing, platform, communication, design, and quality assurance teams in accordance with the organization's goals, as well as budgeting, execution of, and collating and reporting results for new and retention marketing campaigns for all games for which DoubleU Games provides services and conducts user acquisition and retention programs. Mr. Kim also participated in the acquisition of DoubleDown Interactive, LLC in 2017. Previously, Mr. Kim was a director of Hulab Co., Ltd. from February 2012 to February 2015. He has worked in the gaming industry for more than four years as a senior executive. Mr. Kim received a Bachelor of Science in Civil, Urban and Geosystem Engineering and a Bachelor of Business Administration from Seoul National University in 2005.

Yanghoon Cho, Independent Director. Mr. Cho has served as an independent director since May 20, 2020. Mr. Cho is a vice president at GiantChemical Co., Ltd., a chemical company based in Korea. From 1996 to 2019, Mr. Cho served as a mergers and acquisitions advisor for Korea Investment & Securities. From 2019 to 2020, Mr. Cho served as a partner for Jungjinsirim Accounting Firm based in Korea. Mr. Cho is a Korea Certified Public Accountant and received a Master of Business Administration from Yonsei University in 2005. Mr. Cho is sophisticated in financial matters, including financial statements and audits, and is a financial expert.

Jaesung Chung, Independent Director. Mr. Chung has served as an independent director since May 20, 2020. He has worked as Chief Executive Officer of NTT Korea Co., Ltd. since 2019. Mr. Chung previously served as Vice President of Sun Microsystems from 2005 to 2011, as General Manager of IBM Korea

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Software Group from 2011 to 2014 and as Chief Executive Officer of Dimension Data Korea from 2014 to 2019. Mr. Chung received his Ph.D. in Computer Science from Lehigh University in 1990. Mr. Chung is sophisticated in information technology, including system integration and information & communication technology.

Board Diversity

The table below provides certain information regarding the diversity of the board of directors as of the date of this Annual Report:

Board Diversity Matrix

Country of Principal Executive Offices:	Republic of Korea
Foreign Private Issuer	Yes
Disclosure Prohibited under Home Country Law	No
Total Number of Directors and Board Observers	6

	<u>Female</u>	<u>Male</u>	<u>Non-Binary</u>	<u>Did Not Disclose Gender</u>
Part I: Gender Identity				
Directors	1	5	—	—
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction			—	
LGBTQ+			—	
Did Not Disclose Demographic Backgrounds			—	

While we have not adopted a formal diversity policy, we are mindful of the benefit that diversity can provide in maximizing the effectiveness and decision-making abilities of our Board. In this regard, we are committed to increasing diversity on the Board. In searches for new director candidates, we will consider the level of diversity, including representation of underrepresented individuals and female representation, on the Board, which will be one of several factors used in the search process. Further, we will continuously monitor the level of representation of underrepresented individuals and female representation and recruit qualified underrepresented individuals and/or female candidates as part of our overall recruitment and selection process to fill openings, as the need arises, through vacancies, growth or otherwise.

B. Compensation

Compensation of directors

To date, none of our directors have received compensation for their service to the Company as a member of our board of directors. In the future, we intend to adopt a policy to provide competitive compensation to our directors who are not our employees that will enable us to attract and retain high-quality directors, provide them with compensation at a level that is consistent with our compensation objectives and encourage their ownership of our common shares to further align their interests with those of our shareholders. Our directors who are also our employees will receive no additional compensation for their service as members of our board of directors.

Executive compensation

Consistent with disclosure requirements under applicable Korean law, we are required to report, on an aggregate basis, the compensation of our directors and officers as a group. For the fiscal years ended December 31, 2021, 2020 and 2019, aggregate compensation of our directors and officers was \$2,379,042, \$3,142,591 and \$3,154,480, respectively.

Employment agreements

We entered into a letter agreement with each of our Chief Executive Officer, In Keuk Kim, our Chief Marketing Officer, Haenam Kim, and Chief Data Officer, Ki Chul Kim with effect from October 1, 2017. Under their respective letter agreement, each executive is entitled to an annual base salary, subject to adjustment annually, and is eligible to participate in the bonus and incentive compensation programs, as may be adopted by the Company from time to time, subject to an assessment of such executive's performance during the course of the year and the Company's financial results. Bonuses are subject to the Company's discretion and are not guaranteed.

We entered into an employment agreement with Joseph A. Sigrist, our Chief Financial Officer, with effect from June 1, 2017, in connection with our acquisition of DDI-US. Under the terms of Mr. Sigrist's employment agreement, Mr. Sigrist is entitled to an annual base salary, subject to adjustment annually, and is eligible to participate in bonus and incentive compensation programs, as may be adopted by the Company from time to time, subject to an assessment of such executive's performance during the course of the year and the Company's financial results. In addition, Mr. Sigrist is entitled to reimbursement annually for his personal federal income tax preparation costs.

Outstanding equity awards at fiscal year-end; Incentive compensation programs

The Company has not, to date, made any awards of equity to its directors, executive officers or employees in connection with their service to us. We intend to propose for adoption by our Board an incentive compensation program for our executive officers and key employees in the future.

C. Board Practices

The board of directors' mandate is to manage or supervise the management of the business and affairs of the Company and to act with a view to the best interests of the Company. Our corporate governance practices are the responsibility of the board, the members of which are elected by and are accountable to the shareholders, and takes into account the role of the individual members of management who are appointed by the board and who are charged with the day-to-day management of the Company. The board and senior management consider good corporate governance to be central to the effective and efficient operation of the Company.

The board is specifically responsible for approving long-term strategic plans and annual operating plans and budgets recommended by management. Board consideration and approval is also required for all material contracts, business transactions and all debt and equity financing proposals. The board also takes responsibility for identifying the principal risks of our business and for ensuring these risks are effectively monitored and mitigated to the extent reasonably practicable. In keeping with its overall responsibility for the stewardship of the Company, the board is also responsible for the integrity of the Company's internal control and management information systems and for the Company's policies respecting corporate disclosure and communications.

The board delegates to management, through the Chief Executive Officer, responsibility for meeting defined corporate objectives, implementing approved strategic and operating plans, carrying on the Company's business in the ordinary course, managing the Company's cash flow, evaluating new business opportunities, recruiting staff and complying with applicable regulatory requirements. The board also looks to management to furnish recommendations respecting corporate objectives, long-term strategic plans and annual operating plans. The board monitors the adequacy of information given to directors, communication between the board and management and the strategic direction and processes of the board and any committees.

The board considers its size each year when it considers the number of directors to recommend to the shareholders for election at the annual meeting of shareholders, taking into account the number required to carry out the board's duties effectively and to maintain a diversity of views and experience. Our board of directors currently consists of six members. Each director will hold office for three years from the date of appointment, provided,

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however, that the term of office shall be extended until the close of the ordinary general meeting of shareholders convened in respect of the last fiscal year of such term of office. Under the Commercial Act of Korea, (i) an ordinary resolution, which is adopted by an affirmative majority vote of the shares present representing at least one-fourth of the total number of the shares then issued and outstanding, is required to elect a director, and (ii) a special resolution, which is adopted by at least two-thirds of the votes of the shares present representing a quorum of at least one-third of the total number of the shares then issued and outstanding, is required to remove a director. Under the Commercial Act of Korea, the number of directors shall be at least three, although our articles of incorporation may make the requirement of minimum number of directors more stringent.

The board as a whole has the responsibility of determining the compensation for directors and officers. To determine compensation payable, the board considers an appropriate compensation reflecting the need to provide incentive and compensation for the time and effort expended by the directors, while taking into account the financial and other resources of the Company. Compensation of our executive officers is based upon a maximum remuneration amount determined and approved at our general shareholders' meeting each year in accordance with Korean law and practice. Any performance-based bonus of such officer for such year is determined and approved by the board within such maximum remuneration amount. The remuneration amount of each employee of the Company is determined based on the Company's compensation rules and regulations and we pay such remuneration amount after obtaining approval from our Chief Executive Officer.

The board does not currently have an independent chairperson and, at this stage of our development, the board does not feel it is necessary to have one to ensure that the board can function independently of management, as sufficient guidance is found in the applicable corporate and securities legislation and regulatory policies. The non-management directors exercise their responsibilities for independent oversight of management, and are provided with leadership through their position on the board and ability to meet independently of management whenever deemed necessary. In addition, each member of the board understands that he or she is entitled to seek the advice of an independent expert if he reasonably considers it warranted under the circumstances.

Our Chief Executive Officer, In Keuk Kim, and our Chief Marketing Officer, Haenam Kim, are married. There are no other family relationships among any of our other directors or executive officers.

Audit committee

As of the date of this annual report, our board of directors has one standing committee, an Audit Committee, as permitted by Korean law. The expected composition, duties, and responsibilities of this committee is set forth below. As noted above, we have two independent directors on this committee, consistent with requirements of Korean law and in order to satisfy NASDAQ corporate governance requirements.

The Audit Committee's responsibilities, pursuant to its written charter, include:

- appointing, approving the compensation of, and assessing the independence of our registered public accounting firm;
- overseeing the work of our registered public accounting firm, including through the receipt and consideration of reports from such firm;
- reviewing and discussing with management and our registered public accounting firm our annual and quarterly financial statements and related disclosures;
- assisting our board of directors in overseeing our internal control over financial reporting and disclosure controls and procedures;
- reviewing the effectiveness of our risk management policies;
- reviewing legal, regulatory and compliance matters that could have a significant impact on our financial statements;

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- meeting independently with our internal auditing staff, if any, our registered public accounting firm, and management; and
- reviewing and approving or ratifying related person transactions.

The members of our Audit Committee are Ki Chul Kim, Yanghoon Cho, and Jaesung Chung, all of whom meet the requirements for financial literacy under the NASDAQ rules. Yanghoon Cho serves as the chairperson of the committee. Our board of directors has determined that Yanghoon Cho and Jaesung Chung meet the independence requirements of Rule 10A-3 under the Exchange Act and the applicable NASDAQ rules. Our board of directors has determined that Yanghoon Cho is an “audit committee financial expert” as defined in Item 407(d)(5) of Regulation S-K and has the requisite financial sophistication as defined under the applicable NASDAQ rules.

Role of the board in risk oversight

One of the key functions of our board of directors is informed oversight of our risk management process. Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through our board of directors as a whole, as well as through various standing committees of our board of directors that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure, including risks associated with cybersecurity and data protection, and our Audit Committee has the responsibility to consider our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies to govern the process by which risk assessment and management is undertaken. In addition, our Audit Committee reviews legal, regulatory and compliance matters that could have a significant impact on our financial statements. Our Audit Committee also monitors the effectiveness of our corporate governance practices, including whether they are successful in preventing illegal or improper liability-creating conduct.

D. Employees

For information regarding our employees, see “Item 3B. Business Overview” of this annual report.

E. Share ownership

For information regarding the share ownership of our directors and executive officers, see “Item 7A. Major shareholders.”

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

The following table and accompanying footnotes set forth certain information with respect to the beneficial ownership of our common shares as of the date of this annual report, by:

- each of our directors and named executive officers;
- all of our directors and named executive officers as a group; and
- each person or entity (or group of affiliated persons or entities) known by us to be the beneficial owner of 5% or more of our common shares.

To our knowledge, each shareholder named in the table has sole voting and investment power with respect to all of the common shares shown as beneficially owned by such shareholder, except as otherwise set forth in the footnotes to the table. The number of common shares shown represents the number of shares the person “beneficially owns,” as determined by the rules of the SEC. The SEC has defined “beneficial” ownership of a security to mean the possession, directly or indirectly, of voting power and/or investment power.

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The percentages reflect beneficial ownership (as determined in accordance with Rule 13d-3 under the Exchange Act) are based on 2,477,672 common shares issued and outstanding as of the date of this annual report.

Except as noted in the footnotes to the table below, the address for all of the shareholders in the table below is c/o DoubleDown Interactive Co., Ltd., 13F, Gangnam Finance Center, 152, Teheran-ro Gangnam-gu, Seoul 06236, Korea.

Name of beneficial owner	Common shares beneficially owned as of December 31, 2021 ⁽¹⁾	
	Shares	Percent
Directors and executive officers:		
In Keuk Kim	*	*
Joseph A. Sigrist	*	*
Haenam Kim	*	*
Ki Chul Kim	*	*
Yanghoon Cho	*	*
Jaesung Chung	*	*
All directors and executive officers as a group (6 persons)	*	*
Principal shareholders:		
DoubleU Games Co., Ltd. ⁽²⁾	1,661,191	67.1%
STIC Special Situation Diamond Limited ⁽³⁾	500,681	20.2%
Bryant R. Riley ⁽⁴⁾	205,388	8.3%

* Represents less than 1% of the number of common shares outstanding.

- (1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act. A person is deemed to be the beneficial owner of any common shares if that person has or shares voting power or investment power with respect to those shares or has the right to acquire beneficial ownership at any time within 60 days.
- (2) The address for DoubleU Games is 16F, Gangnam Finance Center, 152, Teheran-ro Gangnam-gu, Seoul 06236, Korea.
- (3) The address for STIC Special Situation Diamond Limited is 10F, MSA Building, 12, Teheran-ro 78-gil, Gangnam-gu, Seoul 06194, Korea.
- (4) Based on information provided in a Schedule 13G/A that was filed with the Commission on February 11, 2022 by B. Riley Securities, Inc., BRF Investments, LLC, B. Riley Financial, Inc. and Bryant R. Riley. Bryant R. Riley may beneficially own 4,107,768 ADSs, which represent 205,388.4 common shares, of which (a) 271,256 ADSs, which represent 13,562.8 common shares, are held jointly by Bryant R. Riley and his spouse, (b) 20,000 ADSs, which represent 1,000 common shares, are held as sole trustee of the Robert Antin Children Irrevocable Trust Dtd. 1/1/01 (the "Robert Antin Children Trust"), (c) 322 ADSs, which represent 16.1 common shares, are held as sole custodian for the benefit of Abigail Riley, (d) 322 ADSs, which represent 16.1 common shares, are held as sole custodian for the benefit of Charlie Riley, (e) 322 ADSs, which represent 16.1 common shares, are held as sole custodian for the benefit of Eloise Riley, (f) 322 ADSs, which represent 16.1 common shares, are held as sole custodian for the benefit of Susan Riley, and (g) 3,815,224 ADSs, which represent 190,761.2 common shares, are held directly by B. Riley Securities, Inc. and BRF Investments, LLC, each of which is an indirect wholly owned subsidiary of B. Riley Financial, Inc. Bryant R. Riley is the Co-Chief Executive Officer of B. Riley Financial, Inc. The address for Bryant R. Riley is 11100 Santa Monica Boulevard, Suite 800, Los Angeles, California 90025, USA.

As of the date of this annual report, none of our common shares are held by record holders in the United States.

We are not aware of any arrangement that may, at a subsequent date, result in change of control of our Company.

For additional information about our principal shareholders, see “Item 7B. Related party transactions.”

B. Related Party Transactions

The following includes summaries of transactions or agreements, during our last three fiscal years, to which we have been a party, in which the amount involved in the transaction exceeded \$120,000, and in which any of our directors, executive officers or beneficial owners of more than 5% of our capital stock, affiliates of our directors, executive officers and holders of more than 5% of our voting securities or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other similar arrangements, which are described under “Item 6B. Compensation.” The following summaries are qualified in their entirety by reference to such agreements, copies of which (or forms of such agreements) have been filed as exhibits to the registration statement of which this annual report is a part, and are available electronically on the website of the SEC at www.sec.gov.

Our relationship with DoubleU Games

In addition to the licensing and research and development arrangements and a sub-lease agreement we have with DoubleU Games, as described under “Item 4B. Business overview—Intellectual property,” “Item 4B. Business overview—Game and content development,” and Note 10 and Note 12 to our audited consolidated financial statements contained elsewhere in this annual report, we are party to certain loan agreements with DoubleU Games, as described under “Item 5B. Liquidity and capital resources—Short-term and long-term borrowings.”

We entered into the DoubleU Games License Agreement on March 7, 2018, and it was subsequently amended on July 1, 2019 and November 27, 2019. Pursuant to the DoubleU Games License Agreement, DoubleU Games grants us an exclusive license to develop and distribute certain DoubleU Games social casino game titles and sequels thereto in the social online game field of use. The exclusive license is subject to our payment of royalties with certain customary terms and conditions. The Company incurred royalties of \$8.7 million and \$6.1 million for years ended December 31, 2021 and 2020, respectively. The agreement remains in effect until either DUG no longer holds an interest, directly or indirectly, in DDI, or DDI no longer holds an interest, directly or indirectly, in DDI-US. In such event, the agreement provides that the parties will mutually renegotiate the terms of the agreement. As of December 31, 2021, we license approximately 42 game titles under the terms of this agreement.

On February 25, 2020, we acquired Double8 Games from DoubleU Games in exchange for KRW2.3 billion (US\$2.0 million). Double8 Games is based in Seoul, Korea, with the primary business of developing digital gaming content for international markets. See Note 1 to our audited consolidated financial statements appearing elsewhere in this annual report.

On November 1, 2022, DDI-US entered into that certain Mobile Game Distribution and Service Agreement (the “Publishing Agreement”) with DoubleU Games (the “Licensor”) in connection with the *Undead World: Hero Survival* (the “Game”). Pursuant to the Publishing Agreement, DoubleU Games grants us an exclusive license to, (i) distribute and market the Game in the geographical territory throughout the entire world, and (ii) provide services related to the server administration and management of the game, technical support assistance to end users, billing to end users, marketing of the Game and any other activities stipulated in and contemplated under this Agreement. The exclusive license is subject to our payment of royalties with certain customary terms and conditions. We did not incur royalty expenses for the year ended December 31, 2021. The agreement remains in effect until either DDI-US or the Licensor commits either one or more of the followings, (i) a material breach of any of its obligations under this Agreement and such material breach is not remedied within sixty (60) calendar days from the giving of written notice requiring the said breach to be remedied, (ii) or its creditors or any other eligible party makes a filing for liquidation, bankruptcy, reorganization, compulsory composition or dissolution, or, (iii) either DDI-US or the Licensor becomes incapable for a period of ninety

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(90) days of performing any of its said obligations under this Agreement due to causes beyond its reasonable control such as strikes, lockouts or other labor disputes, electrical power outages or shortages, riots, civil disturbances, actions or inactions of governmental authorities or suppliers, epidemics, war, embargoes, severe weather, fire, earthquake, acts of God or the public enemy.

Joint Investment Agreement

In 2017, in connection with the acquisition of DDI-US, a Joint Investment Agreement was executed by DUG and STIC Special Situation Private Equity Fund ("STIC"). As part of consummating the Joint Investment Agreement, we also entered into a series of additional inter-related multiple element financing agreements with STIC, whereby we issued to STIC, pursuant to a subscription agreement, (i) aggregate principal amount KRW210 billion of 2.5% Convertible Bonds due 2024 (the "2.5% Convertible Bonds"), unless earlier redeemed or converted into 715,258 common shares at an initial conversion price of KRW293,600, subject to certain adjustments, and (ii) aggregate principal amount of KRW90 billion 2.5% Non-convertible Bonds due 2024 (the "2.5% Non-convertible Bonds") with detachable warrants to purchase 306,540 common shares at an initial exercise price of KRW293,600 per share, subject to certain adjustments. We collectively refer to the 2.5% Convertible Bonds and the 2.5% Non-convertible Bonds as the "Bonds." See further discussion of the Bonds and the warrants, below.

On July 16, 2021, DoubleU Games entered into a second amendment to the Joint Investment Agreement with STIC which granted STIC the right to sell to DoubleU Games up to 214,577 shares of our common shares held by STIC at a price no less than the initial public offering price (the "DUG Private Purchase Agreement"). Pursuant to the DUG Private Purchase Agreement, if STIC elected to exercise such right, STIC had to deliver to DoubleU Games a written notice, which set forth the number of common shares that it intended to sell, within five (5) business days from the earlier of (a) the exercise date of the over-allotment option in connection with the IPO, or (b) the expiration of over-allotment option in connection with the IPO.

With the completion of the IPO on September 2, 2021, all obligations under the Joint Investment Agreement were met and, as such, the agreement terminated.

Bonds

2.5% convertible bonds

At various dates in May and September 2020, STIC, as holder of the 2.5% Convertible Bonds, exercised its right to convert all outstanding bonds into 715,258 common shares. In connection with these transactions, we paid STIC the accrued coupon interest of \$0.9 million and the unpaid yield-to-maturity interest of \$4.5 million was forfeited.

The conversion of the 2.5% Convertible Bonds was in accordance with the original terms of the instruments and were not subject to an inducement offer to convert as the terms of the conversion were not modified. As a result, the carrying value of the 2.5% Convertible Bonds, plus the forfeited yield-to-maturity interest, net of related income tax effects was recorded to common shares and additional paid-in-capital with no gain or loss recognized.

2.5% non-convertible bonds

On May 15, 2020, DUG exercised its call option right and simultaneously redeemed the 2.5% Non-convertible bonds as consideration to exercise the warrants into 306,539 shares of common stock. In connection with this transaction, we paid DUG the 2.5% accrued but unpaid coupon interest of \$0.3 million and the unpaid yield-to-maturity interest of \$1.9 million was forfeited and the remaining unaccrued bond discount eliminated. As a result, the carrying value of the 2.5% Non-convertible Bonds with warrants, plus the forfeited yield-to-maturity interest, net of related income tax effects was recorded to common shares and additional paid-in-capital with no gain or loss recognized.

Policies and procedures for related person transactions

Our Audit Committee's charter includes a related person transaction policy, setting forth the policies and procedures for the review and approval or ratification of related person transactions. This policy will cover any transaction, arrangement, or relationship, or any series of similar transactions, arrangements, or relationships that meets the disclosure requirements set forth in Item 404 of Regulation S-K under the Securities Act, or Item 404, in which we were, are or are to be a participant, and in which a "related person", as defined in Item 404, had, has or will have a direct or indirect material interest, including without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness, and employment by us of a related person. In reviewing and approving any such transactions, our Audit Committee will be tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's-length transaction and the extent of the related person's interest in the transaction. We expect that, under the approval policy, the Audit Committee will similarly oversee approval of transactions and arrangements between us and our subsidiaries, on the one hand, and between DoubleU Games and us and our subsidiaries, on the other hand, to the extent involving amounts in excess of \$120,000.

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

See the audited consolidated financial statements and the notes to such consolidated financial statements in Item 18 of this annual report.

Legal and Administrative Proceedings

We have been party to, are currently party to, and in the future may become subject to additional, legal proceedings in the operation of our business, including, but not limited to, with respect to consumer protection, gaming-related matters, employee matters, alleged service and system malfunctions, alleged intellectual property infringement, and claims relating to our contracts, licenses and strategic investments.

For example, in 2015, a plaintiff commenced a putative class action in the United States District Court for the Western District of Washington against Churchill Downs Incorporated, one of our competitors, alleging that Churchill Downs' virtual game platform, "Big Fish Casino," violated Washington's Recovery of Money Lost at Gambling Act ("WRMLGA") and Consumer Protection Act ("CPA"). The District Court dismissed plaintiff's action. On March 28, 2018, the United States Court of Appeals for the Ninth Circuit reversed the District Court's holding, concluding that, because Big Fish Casino's virtual chips are a "thing of value," Big Fish Casino falls under the WRMLGA. The Ninth Circuit remanded the action to the District Court for further proceedings consistent with its opinion. On March 4, 2020, plaintiff's motion for class certification was denied by the District Court without prejudice to refile. Additional class actions have been commenced against other of our competitors on similar grounds, certain of which, including Churchill Downs, have finalized settlements which the court approved on February 11, 2021 in amounts of \$6.5 million, \$38.0 million, and \$155.0 million. These settlements included requirements for modifications to the games that allowed them to continue to operate. We have assessed these required modifications and have already implemented these changes to the ways our DoubleDown Casino game operates. Such amounts are illustrative only and are not indicative of, and provide no certainty with respect to, amounts at which other cases, including the *Benson* case discussed below, may settle, if at all, or amounts that may be rendered in a judgment after trial on the merits.

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In April 2018, a putative class action lawsuit, *Benson, et al. v. DoubleDown Interactive, LLC and International Game Technology*, was filed against DDI-US in the United States District Court for the Western District of Washington based upon the theory, like Big Fish Casino, that the use of the DoubleDown Casino Facebook and mobile applications violated the WRMGLA and CPA. The plaintiffs make their allegations on behalf of themselves and “all persons in the United States who purchased and lost chips by wagering at the DoubleDown Casino.” Plaintiffs seek to recover, on behalf of themselves and the class, among other things, (i) all money they wagered and lost playing DDI-US games; and (ii) treble damages. Plaintiffs also seek injunctive and/or declaratory relief as necessary to protect the interests of Plaintiff and the class. On November 13, 2018, the District Court denied DDI-US’s motion to compel arbitration. DDI-US filed an appeal to the United States Court of Appeals for the Ninth Circuit, arguing that plaintiff’s action should have been dismissed because their individual cases are subject to the arbitration agreement in the applicable Terms of Use. On January 29, 2020, DDI-US’s appeal to the Ninth Circuit was denied and the case was remanded to the District Court for further proceedings. On June 17, 2020, the Company filed a motion in the United States District Court for the Western District of Washington, which, if granted, would certify certain questions of state law to the Washington State Supreme Court for interpretation in accordance with applicable state law. On August 11, 2020, the District Court denied DDI-US’s motion to certify certain questions to the Washington State Supreme Court. DDI-US subsequently filed a motion asking the court to reconsider this decision. On January 15, 2021, this motion for reconsideration was denied. On August 13, 2020, DDI-US filed a motion to strike the plaintiffs’ nationwide class allegations. On March 19, 2021, this motion was denied. On September 10, 2020, DDI-US filed a complaint in Washington State court against the two plaintiffs in the federal court case arguing, that, since the gambling law referenced in the federal action is a Washington state law, any complaint should be litigated in Washington State court. On February 25, 2021, plaintiffs filed a motion for class certification and for preliminary injunction. Discovery in the federal court case has commenced and is continuing. On July 19, 2021, the court ordered that the parties hold a settlement conference by September 7, 2021. On April 25, 2021, plaintiffs filed their Second Amended Complaint, changing their allegations to include an additional corporate entity of codefendant, IGT. DDI-US served plaintiffs with its expert disclosures and filed an Opposition to Plaintiffs’ Motion for Class Certification and Preliminary Injunction on May 11, 2021. On June 29, 2021, the court denied the Company’s motion for the certification of an interlocutory appeal from the court’s order denying the Company’s Motion to Strike Nationwide Class Action Allegations. No trial date has been set at this time. We dispute any allegation of wrongdoing and will continue to vigorously defend ourselves in this matter.

In connection with the *Benson* case, IGT tendered us its defense of the lawsuit and sought indemnity from us and certain of our affiliates for any damages from the lawsuit, based on various agreements associated with IGT’s sale of DDI-US to us. We had previously tendered IGT our defense and sought indemnity from it. The parties have entered into a standstill or tolling agreement, which expired on September 1, 2021, and was extended by agreement until October 1, 2021. On December 20, 2021, IGT submitted a demand for mediation to DDI-US. There can be no guarantee, however, that we will be able to secure indemnification for any damages from the lawsuit.

We have incurred and expect to continue to incur significant expense defending the *Benson* lawsuit, and we may incur in the future significant expense with respect to any other lawsuits to which we may become a party. In general, subject to certain terms and conditions, insurance coverage for our litigation expenses and losses arising out of legal proceedings is assessed by our insurers on a case by case basis and there can be no guarantee that coverage will be available in any particular case. However, in connection with the *Benson* lawsuit, our insurer will not cover such expenses or any losses that could arise for any settlement amount or damages award.

The resolution of the *Benson* lawsuit, whether through the court or through settlement, could have a material adverse effect on our operating results and financial condition. As set out in Note 11 to the audited consolidated financial statements for the years ended December 31, 2021, 2020 and 2019, the Company has recorded a charge to income for this litigation, which is included in general and administrative expenses. However, the Company may experience a loss in excess of the amount recorded, which could be material; the ultimate outcome cannot be known at this time due to the significant incomplete, uncertain, and unknown variables inherent with this stage of the pending litigation. The amount recorded represents management’s

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estimate, in accordance with applicable accounting standards, of the low end of the reasonably possible range of loss of \$3.5 million to \$201.5 million. Management will continue to evaluate the reasonably possible range of loss and the amount recorded as the litigation proceeds over time, potentially resulting in a material adjustment thereto. As noted above, our operating results and financial condition could be materially adversely impacted by the resolution of the *Benson* case. We continue to dispute any allegation of wrongdoing and we intend to continue our vigorous defense in this matter. There can be no guarantee that, in such an event, we will be able to recover all or any part of any damages award or, if applicable, settlement amount, or obtain a contribution with respect thereto, from any other defendant. Additionally, there can be no guarantee as to what, if any, additional modifications any judgments or settlements might impose on one or more of our games.

In the future, additional legal proceedings or regulatory investigations targeting our social casino games and claiming violations of state or federal laws could also occur in other states, based on the unique and particular laws of each jurisdiction. We could, in connection with any such proceedings or regulatory actions, including as a result of the *Benson* case, be restricted from operating social casino games in certain states, or be required to make modifications to the operation of one or more of our games, or have to pay significant damage awards or settlement amounts. We cannot predict the likelihood, timing, or scope of the consequences of such an outcome, or the outcome of any other legal proceedings to which we may be a party, any of which could have a material adverse effect on our results of operations, cash flows, or financial condition.

In addition, in December 2020, a patent infringement claim, *NEXRF Corp. v. DoubleU Games Co., Ltd., et al.*, was filed against DoubleU Games, DDI-US and us in the United States District Court for the Western District of Washington. The plaintiff alleges that the defendants are infringing certain patents related to certain of its games and is seeking monetary damages. On April 29, 2021, we, DoubleU Games, and DDI-US filed a motion to dismiss the case as well as a motion to stay discovery pending adjudication of the motion to dismiss. The parties agreed to an interim stay of discovery pending resolution of the motion to stay. During the pendency of the defendants' motions, however, a federal court in Nevada issued an order invalidating the asserted patents on the basis of patent ineligibility. The plaintiff has appealed this ruling to the federal circuit. The parties agreed to stay the litigation pending the outcome of the plaintiff's appeal of the Nevada decision. The case is now stayed, effective September 3, 2021. We intend to defend the case vigorously.

On May 14, 2021, Hanover Insurance Co. filed a declaratory judgment action alleging that its insurance policy does not cover the claims made by *NEXRF Corp. v. DoubleU Games Co., Ltd., et al.* The plaintiff requested that defendants sign a waiver of service. The defendants have responded to the plaintiff's request.

See "Item 3D. Risk factors—Legal proceedings may materially adversely affect our business and our results of operations, cash flows, and financial condition" and "Item 4B. Business overview—Regulation of the industry."

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offer and Listing Details

ADSs representing our common shares have been listed and traded on The NASDAQ Stock Market under the symbol "DDI" since August 31, 2021. Each ADS represents 0.05 of a common share of the Company.

B. Plan of Distribution

Not applicable.

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C. Markets

See Item 9A of this annual report for the stock exchange on which the ADSs are currently traded.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

Board of directors

Under our articles of incorporation and the Commercial Act, any director who has a special interest in a proposal or a resolution is prohibited from voting on such proposal or resolution at a meeting of the board of directors. Unless otherwise provided in the relevant laws or our articles of incorporation, a resolution of the board of directors is required to be adopted in the presence of a majority of the directors in office by the affirmative votes of a majority of the directors present at the meeting.

The compensation for the directors, including severance benefits, is paid within the limitation approved by the annual general meeting of shareholders.

Dividends

If and when our board of directors declares dividends, we will distribute the dividends to our shareholders in proportion to the number of shares owned by each shareholder. The common shares represented by the ADSs have the same dividend rights as other outstanding common shares. There is no guarantee that our board will declare a dividend at any time and it has no obligation to do so.

We may declare dividends annually at the annual general meeting of shareholders which is held within three months after the end of the fiscal year. If declared, we pay the dividend shortly after the annual general meeting to the shareholders of record as of the end of the preceding fiscal year. In addition to annual dividends, we may declare semi-annual dividends pursuant to the resolution of the board of directors each fiscal year to the eligible shareholders recorded as of the relevant record date of the relevant fiscal year. We may distribute dividend in cash or shares. However, a dividend in shares must be distributed at par value and may not exceed one-half of the annual dividends declared each fiscal year in the aggregate. We have no obligation to pay any dividend unclaimed for five years from the payment date.

Under the Commercial Act, we may pay dividends only to the extent the net assets amount in our balance sheets exceeds the sum of the following: (i) our stated capital, (ii) the total amount of our capital surplus reserve and earned surplus reserve accumulated up to the end of the relevant fiscal year, (iii) the legal reserve to be set aside for the annual dividends, and (iv) unrealized profits determined pursuant to the relevant provisions of the Presidential Decree to the Commercial Act. We may not pay dividends unless we have set aside as earned

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surplus reserve an amount equal to at least 10% of the cash portion of dividends for the relevant fiscal year or unless we have accumulated earned surplus reserve of not less than one-half of our stated capital. We may not use the legal reserve to pay cash dividends but we may transfer amounts from the legal reserve to capital stock or use the legal reserve to reduce an accumulated deficit.

Distribution of free shares

In addition to paying dividends in shares out of our retained or current earnings, we may also distribute to our shareholders an amount transferred from our capital surplus or legal reserve to our stated capital in the form of free shares. We must distribute such free shares to all our shareholders in proportion to their existing shareholdings.

Preemptive rights and issuance of additional shares

We may issue authorized but unissued shares at the times and, unless otherwise provided in the Commercial Act, on such terms as our board of directors may determine. We must offer new shares on uniform terms to all shareholders with preemptive rights who are listed on our shareholders' register as of the relevant record date.

Notwithstanding the foregoing, we may issue new shares to those other than the shareholders by the resolution of the board of directors under the following circumstances:

- when issuing new shares to increase our capital through a public offering to the extent not exceeding 50% of our total number of issued and outstanding shares pursuant to Article 165-6 of the Financial Investment Services and Capital Markets Act of Korea ("FSCMA");
- when preferentially allocating new shares to members of the Employees Share Ownership Association to the extent not exceeding 20% of our total number of issued and outstanding shares;
- when issuing new shares as a result of the exercise of stock options pursuant to Article 340 of the Commercial Act;
- when issuing new shares for the purpose of the foreign investment made under the Foreign Investment Promotion Act of Korea (as deemed necessary for the management purposes) to the extent not exceeding 20% of our total number of issued and outstanding shares;
- when issuing new shares to the extent not exceeding 20% of our total number of issued and outstanding shares to a new technology venture capitalist and new technology venture investment association pursuant to the Specialized Credit Finance Business Act of Korea and to an investment company for the establishment of small and medium enterprise and a small and medium enterprise establishment investment association pursuant to the Support for Small and Medium Enterprise Establishment Act of Korea;
- when allocating new shares to another company to the extent not exceeding 20% of our total number of issued and outstanding shares for a strategic partnership, such as through the introduction of high technology, business diversification, overseas expansion, and fundraising;
- when necessary to achieve our business objectives, such as an introduction of new technology, improvement of financial structure, new market development, and strategic partnership pursuant to a proviso of Article 418(2) of the Commercial Act to the extent not exceeding 50% of our total number of issued and outstanding shares;
- when issuing new shares to financial institutions or institutional investors, domestic and/or international, to the extent not exceeding 20% of our total number of issued and outstanding shares for managerial purposes including, without limitation, raising emergency funds; or
- when offering new shares to the public or having an underwriter subscribe for shares in such public offering in order to have our shares listed on a stock exchange.

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Under our articles of incorporation, we may issue convertible bonds up to an aggregate principal amount not exceeding 300 billion Korean Won to persons other than the existing shareholders pursuant to a resolution of the board of directors. Notwithstanding the foregoing, our issuance of convertible bonds to persons other than existing shareholders is limited to the following events:

- the issuance of convertible bonds through a general public offering;
- the issuance of convertible bonds to financial institutions or institutional investors, domestic or international, for the purpose of raising emergency funds; or
- the issuance of convertible bonds to another party for the introduction of technology, research and development, production and sales, and capital alliances which are important in our business operations.

Under our articles of incorporation, we may issue bonds with warrants up to an aggregate principal amount not exceeding 200 billion Korean Won to persons other than the existing shareholders pursuant to a resolution of the board of directors. Notwithstanding the foregoing, our issuance of the bonds with warrants to persons other than existing shareholders is limited to the following events:

- the issuance of bonds with warrants through a general public offering;
- the issuance of bonds with warrants to financial institutions or institutional investors, domestic or international, for the purpose of raising emergency funds; or
- the issuance of bonds with warrants to another party for the introduction of technology, research and development, production and sales, and capital alliances which are important in our business operations.

General meeting of shareholders

We generally hold the annual general meeting of shareholders within three months after the end of each fiscal year. Subject to the resolution of the board of directors or court approval, we may hold an extraordinary general meeting of shareholders:

- as necessary;
- at the request of holders of an aggregate of three percent or more of our outstanding common shares; or
- at the request of our audit committee.

We must give our shareholders a written notice setting out the date, place, and agenda of the meeting at least two weeks prior to the general meeting of shareholders. The agenda of the general meeting of shareholders is determined at the meeting of the board of directors. In addition, a shareholder holding an aggregate of three percent or more of the outstanding shares may propose an agenda for the general meeting of shareholders. Such proposal should be made in writing at least six weeks prior to the meeting. The board of directors may decline such proposal if it is in violation of the relevant law and regulations or our articles of incorporation. Shareholders not on the shareholders' register as of the record date are not entitled to receive notice of the general meeting of shareholders or attend or vote at the meeting.

Our general meetings of shareholders are held in the place where our head office is located and may also be held in any other place adjacent to it, whenever circumstances require.

Voting rights

Our shareholders are entitled to one vote for each share. However, shares held by us (i.e., treasury shares) or by any corporate entity in which we directly or indirectly hold equity interests greater than 10% of the total equity interests do not have voting rights. Unless our articles of incorporation explicitly state otherwise, the Commercial Act permits cumulative voting pursuant to which each common share entitles the shareholder

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thereof to multiple voting rights equal to the number of directors to be elected at such time. A shareholder may exercise all voting rights with respect to his or her shares cumulatively to elect one director. However, our articles of incorporation prohibit cumulative voting.

Our shareholders may adopt resolutions at a general meeting of shareholders, where a quorum is present, by an affirmative majority vote of the voting shares present or represented at the meeting. However, under the Commercial Act and our articles of incorporation, the following matters, among others, require a special resolution and approval by the shareholders of at least two-thirds of the voting shares present or represented at a meeting, where the affirmative votes also represent at least one-third of our total voting shares then issued and outstanding:

- amending our articles of incorporation;
- removing a director;
- effecting any dissolution, merger, or consolidation of us;
- transferring the whole or any significant part of our business;
- acquisition of all or a part of the business of any other company that may have a material impact on our business; or
- issuing any new shares at a price lower than their par value. Our shareholders may exercise their voting rights by proxy. Under our articles of incorporation, the person exercising the proxy does not have to be a shareholder. A person with a proxy must present a document evidencing its power of attorney in order to exercise voting rights.

Holders of ADSs may exercise their voting rights through the ADS depository. Subject to the provisions of the deposit agreement, the holders of ADSs are entitled to instruct the depository on how to vote the common shares underlying their ADSs.

Rights of dissenting shareholders

In some limited circumstances, including the transfer of all or any significant part of our business and our merger or consolidation with another company, dissenting shareholders have the right to require us to purchase their shares. In order for a dissenting shareholder to be entitled to such right, the common shares must have been acquired before the relevant resolution of the board of directors was disclosed to the public or the legal action resulting in the acquisition of the shares must have been taken no later than the date immediately following the date on which the resolution was disclosed. To exercise this right, the dissenting shareholders must submit to us a written notice of their intention to dissent before the applicable general meeting of shareholders. Within 20 days after the relevant resolution is passed, the dissenting shareholders must request us in writing to purchase their shares. We are obligated to purchase the shares of the dissenting shareholders within two months of the expiration of the applicable exercise period. The purchase price for the shares is required to be determined through negotiations between the dissenting shareholders and us. If an agreement is not attained within 30 days of the expiration of the applicable exercise period, we or the dissenting shareholder requesting the purchase of shares may request the court to determine the purchase price.

Holders of ADSs may not exercise dissenter's rights unless they withdraw the underlying common shares and become our direct shareholders.

Register of shareholders and record dates

Our transfer agent, Korea Securities Depository, maintains the registry of our shareholders at its office in Seoul, Korea. It records and registers transfers of our shares on the registry of shareholders.

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The record date for annual dividends is December 31 of the applicable fiscal year. For the purpose of determining shareholders entitled to annual dividends, the registry of shareholders is closed for the period from January 1 to January 31 of the following fiscal year. Further, for the purpose of determining shareholders entitled to any other rights pertaining to the shares, we may, on at least two weeks' public notice, set a record date and/or close the registry of shareholders for not more than three months. The trading of shares may continue while the registry of shareholders is closed.

Annual report

At least one week before the annual general meeting of shareholders, we must make our annual report and audited financial statements available for inspection at our principal office and at all of our branch offices. In addition, copies of annual reports, the audited financial statements and any resolution adopted at the general meeting of shareholders will be available to our shareholders.

Transfer of shares

Under the Commercial Act, the transfer of shares is effected by the delivery of share certificates. Our shares are registered electronically pursuant to such Act and we have not issued definitive share certificates. Under the Act on Electronic Registration of Stocks, Bonds, Etc. of Korea, the transfer of shares is effected by electronic registration of such transfer. However, to assert shareholders' rights against us, the transferee must have his name and address registered on our register of shareholders. For this purpose, a shareholder is required to file his name, address and seal with our transfer agent. A non-Korean shareholder may file a specimen signature in place of a seal, unless he is a citizen of a country with a sealing system similar to that of Korea. In addition, a non-resident shareholder must appoint an agent authorized to receive notices on his behalf in Korea and file a mailing address in Korea.

The above requirements do not apply to the holders of ADSs.

Under current Korean regulations, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a brokerage, dealing, or collective investment license, and internationally recognized custodians may act as agents and provide related services for foreign shareholders. Certain foreign exchange controls and securities regulations apply to the transfer of shares by non-residents or non-Koreans.

Acquisition of shares

Under the Commercial Act, we may acquire our own shares through (i) purchases on a stock exchange or (ii) purchase of the shares in proportion to the number of shares held by each shareholder on equal terms and conditions, by a resolution of the shareholders at a general meeting of shareholders. The aggregate amount of the acquisition price shall not exceed the excess of our net assets, on a non-consolidated basis, over the sum of (w) our stated capital, (x) the total amount of our capital surplus reserve and earned surplus reserve which have accumulated up to the end of the previous fiscal year, (y) our earned surplus required to be accumulated for the then current fiscal year, and (z) our net assets stated in the balance sheet as being increased as a result of the evaluation of the assets and liabilities in accordance with our accounting principles without being set off against any unrealized losses.

In addition, under the Commercial Act, we may not acquire our own shares if our net assets may fall short of the aggregate amount of the items (w) to (z) above, on a non-consolidated basis, as of the conclusion of the relevant business year of us. In general, our subsidiaries (of whose shares more than 50% are owned by us) may not acquire our shares.

Liquidation rights

In the event of our liquidation, after payment of all debts, liquidation expenses, and taxes, our remaining assets will be distributed among shareholders in proportion to their shareholdings.

Other provisions

Under our articles of incorporation, there exists no provision (i) which may delay or prevent a change in control of us (that is triggered only in the event of a merger, acquisition, or corporate restructuring), (ii) which requires disclosure of ownership above a certain threshold, or (iii) that governs the change in capital that is more stringent than required by the applicable laws in Korea.

Further, under our articles of incorporation, we are required to register the rights to be recorded on share certificates and preemptive right certificates with the electronic registration ledger of the electronic registration authority, in lieu of issuing share certificates and preemptive right certificates.

C. Material Contracts

We have not entered into any material contracts other than in the ordinary course of business and other than those described in “Item 4. Information on the Company” or elsewhere in this annual report.

D. Exchange Controls

General

The Foreign Exchange Transaction Act of Korea and the Presidential Decree and regulations under that Act and Decree, which we refer to collectively as the Foreign Exchange Transaction Laws, regulate investments in Korean securities by non-residents and issuances of securities outside Korea by Korean companies. Non-residents may invest in Korean securities pursuant to the Foreign Exchange Transaction Laws. The Financial Services Commission has also adopted, pursuant to its authority under the FSCMA, regulations that regulate investments by foreigners in Korean securities and issuances of securities outside Korea by Korean companies.

Subject to certain limitations, the Ministry of Economy and Finance has the authority to take the following actions under the Foreign Exchange Transaction Laws:

- if the Korean government deems it necessary on account of war, armed conflict, natural disaster, grave and sudden and significant changes in domestic or foreign economic circumstances, or similar events or circumstances, the Ministry of Economy and Finance may (i) temporarily suspend payment, receipt, or performance under any or all foreign exchange transactions, in whole or in part, to which the Foreign Exchange Transaction Laws apply (including suspension of payment and receipt of foreign exchange), (ii) impose an obligation to deposit, safe-keep, or sell precious metal or any means of payment to The Bank of Korea, a foreign exchange equalization fund, or certain other governmental agencies or financial companies, or (iii) require resident creditors to collect and recover debts owed by non-resident debtors and to retrieve them to Korea; and
- if the Korean government concludes that the international balance of payments and international financial markets are experiencing or are likely to experience significant disruption or that the movement of capital between Korea and other countries is likely to adversely affect its currency policies, exchange rate policies or other macroeconomic policies, the Ministry of Economy and Finance may take action to require any person who intends to effect a capital transaction to obtain permission or to require any person who effects a capital transaction to deposit a portion of the means of payment acquired in such transaction with The Bank of Korea, a foreign exchange equalization fund, or certain other governmental agencies or financial companies.

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The authority of the Ministry of Economy and Finance would not, however, be applicable to foreign investments made pursuant to the Foreign Investment Promotion Act of Korea.

Government review of issuances of ADSs

In order for us to issue ADSs in excess of US\$30 million, we are required to submit a report to the Ministry of Economy and Finance with respect to the issuance of such ADSs prior to and after such issuance. The aggregate principal amount of any foreign currency loans borrowed, and any securities offered and issued, outside Korea during the one-year period immediately preceding the submission of such report will be counted to determine whether such US\$30 million threshold has been exceeded. The Ministry of Economy and Finance may at its discretion direct us to take necessary measures to avoid exchange rate fluctuations in connection with its acceptance of the report of our issuance of the ADSs.

Under current Korean laws and regulations, in order for the depository to accept for deposit any existing common shares from holders of the common shares, other than from us, for the purpose of issuing ADSs representing such common shares, the depository would be required to obtain our prior consent if the number of common shares to be deposited for the purpose of issuing such ADSs exceeds that of the common shares already withdrawn from the ADS facility.

Reporting requirements for holders of substantial interests

In the case of an investment in the amount of ₩100 million or more, (i) an investment by a foreign investor in 10% or more of the outstanding shares with voting rights of a Korean company or (ii) an acquisition by a foreign investor holding shares of a Korean company of a right to nominate or appoint a director or a senior officer of such company constitutes a foreign direct investment for purposes of the Foreign Investment Promotion Act of Korea. Generally, under the Foreign Investment Promotion Act of Korea, such foreign direct investment must be reported to a foreign exchange bank or Korea Trade-Investment Promotion Agency designated by the Ministry of Trade, Industry and Energy prior to such investment. The acquisition of shares in a Korean company by a foreign investor may also be subject to certain foreign or other shareholding restrictions in the event that the restrictions are prescribed in a specific law that regulates the business of the Korean company. Changes in ownership of shares of a Korean company by a foreign direct investor are subject to reporting requirements.

Restrictions applicable to ADSs

No Korean governmental approval is necessary for the sale and purchase of ADSs in the secondary market outside Korea or for the withdrawal of shares underlying ADSs. Persons who have acquired shares as a result of the withdrawal of shares underlying the ADSs may exercise their preemptive rights for any newly issued shares of ours and participate in free distributions and receive dividends on shares without any further governmental approval. In addition, we are required to file a securities registration statement with the Financial Services Commission and such securities registration statement has to become effective pursuant to the FSCMA in order for us to issue shares represented by ADSs, except in certain limited circumstances.

Restrictions applicable to shares

Certificates evidencing common shares of Korean companies must be kept in custody with an eligible custodian in Korea. Only foreign exchange banks, investment dealers or brokers (which may include a Korean securities company and a non-Korean securities company's branch office in Korea), the Korea Securities Depository, asset management companies, and internationally recognized custodians are eligible to act as a custodian of such shares for a non-resident or foreign investor. A custodian acting for a non-resident or foreign investor must deposit the shares with the Korea Securities Depository. However, a foreign investor may be exempted from such deposit requirement with the approval of the Governor of the Financial Supervisory Service (the "Governor") in circumstances where its compliance with such requirement is impracticable, including cases where such compliance would contravene the laws of its home country.

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A foreign investor may appoint one or more standing proxies from among the Korea Securities Depository, foreign exchange banks, investment dealers or brokers (which may include Korean securities companies and Korean branch offices of non-Korean securities companies), asset management companies, and internationally recognized foreign custodians. Generally, a foreign investor may not allow any person, other than its standing proxy, to exercise any rights associated with its shares or perform any tasks related to such shares on its behalf. However, a foreign investor may be exempted from complying with these standing proxy rules with the approval of the Governor in circumstances where such compliance is impracticable, including cases where such compliance would contravene the laws of its home country.

No governmental approval is required for a foreign investor to receive any dividends or sales proceeds in Korean Won of any shares in a Korean company which are to be paid, received, and retained in Korea. Such dividends or sales proceeds received by such foreign investor may be deposited in a Korean Won account established with such investor's investment dealer or investment broker or its Korean Won account established with a foreign exchange bank. Funds in such foreign investor's Korean Won account may be transferred to its foreign currency account in Korea or withdrawn for investing in shares in any Korean company (including the Company) and other limited purposes.

Investment dealers and investment brokers are allowed to open foreign currency accounts with foreign exchange banks exclusively for accommodating foreign investors' stock investments in Korea. Through these accounts, investment dealers and investment brokers may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Korean Won funds, either as a counterparty to or on behalf of foreign investors, without the investors having to open their own accounts with foreign exchange banks.

E. Taxation

The following description is not intended to constitute a complete summary of all tax consequences relating to the ownership or disposition of our common shares, including the ADSs, and does not constitute legal advice. You should consult your own tax advisor concerning the tax consequences of your particular situation, as well as any tax consequences that may arise under the laws of any state, local, foreign, including Korea, or other taxing jurisdiction.

Material Korean income tax considerations

The following is a summary of the principal Korean tax consequences to owners of the common shares or ADSs, as the case may be, who are non-resident individuals or non-Korean corporations without a permanent establishment in Korea to which the relevant income is attributable or with which the relevant income is effectively connected, or Non-resident Holders. The statements regarding Korean tax laws set forth below are based on the laws in force and as interpreted by the Korean taxation authorities as of the date hereof. This summary is not exhaustive of all possible tax considerations that may apply to a particular investor and potential investors are advised to satisfy themselves as to the overall tax consequences of the acquisition, ownership, and disposition of the common shares or ADSs, including specifically the tax consequences under Korean law, the laws of the jurisdiction of which they are resident, and any tax treaty between Korea and their country of residence, by consulting their own tax advisors.

Tax on dividends

Dividends on the common shares or ADSs paid (whether in cash or in shares) to a holder who is not a resident of Korea (a "Non-resident Holder") will be subject to Korean withholding taxes at the rate of 22.0% (including local income tax) or such lower rate as is applicable under a treaty between Korea and such Non-resident Holder's country of tax residence. Free distributions of shares representing a capitalization of certain capital surplus reserves may be subject to Korean withholding taxes.

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The tax is withheld by the payer of the dividend. Excess taxes withheld may be recoverable if you subsequently produce satisfactory evidence that you were entitled to have taxes withheld at a lower rate.

Tax on capital gains

As a general rule, capital gains earned by Non-resident Holders upon transfer of the common shares or ADSs are subject to Korean withholding tax at the lower of (i) 11.0% (including local income tax) of the gross proceeds realized or (ii) 22.0% (including local income tax) of the net realized gains (subject to the production of satisfactory evidence of the acquisition costs and certain direct transaction costs), unless exempt from Korean income taxation under the effective Korean tax treaty with the Non-resident Holder's country of tax residence.

It should be noted that capital gains earned by you (regardless of whether you have a permanent establishment in Korea) from a transfer of ADSs outside Korea will generally be exempt from Korean income taxation so long as the ADSs are deemed to have been issued overseas, provided that this exemption shall not be applicable in the case where the holder of shares prior to the issuance of ADSs holds the newly-issued ADSs (with such shares underlying such ADSs).

Inheritance tax and gift tax

Korean inheritance tax is imposed upon (i) all assets (wherever located) of the deceased if at the time of his death he was domiciled in Korea or had resided in Korea continuously for at least 183 days immediately prior to the death, and (ii) all property located in Korea which passes on death (irrespective of the domicile or residence of the deceased). Gift tax is imposed in similar circumstances to the above. The taxes are imposed if the value of the relevant property is above a certain limit and vary according to the identity of the parties involved.

Under Korean inheritance and gift tax laws, securities issued by a Korean corporation are deemed to be located in Korea irrespective of where they are physically located or by whom they are owned.

If a person dies while holding ADSs or if a person donates ADSs, it is unclear whether, for Korean inheritance and gift tax purposes, such person will be treated as the owner of the common shares underlying the ADSs. If the tax authority deems that ownership of ADSs is to be treated as ownership of the underlying share certificates, the holder of such ADSs may be treated as the owner of the common shares and such person's heir or donee (or in certain circumstances, such person as the donor) will be subject to Korean inheritance or gift tax; provided that the value of the ADSs or the underlying common shares is greater than a specified amount.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

Securities transaction tax

Depository receipts, which the ADSs constitute, are included in the scope of securities the transfers of which are subject to a securities transaction tax. However, transfer of depository receipts listed on a foreign securities exchange similar to that of Korea (e.g., NASDAQ) will not be subject to the securities transaction tax. If you transfer common shares, subject to certain exceptions, you will be subject to a securities transaction tax at the rate of 0.5% and will not be subject to an agriculture and fishery special surtax.

The securities transaction tax, if applicable, must be paid by the transferor of the shares or rights, in principle. When the transfer is effected through a securities settlement company, such settlement company is generally required to withhold and pay (to the tax authority) the tax, and when such transfer is made through a financial investment company with a brokerage license only, such company is required to withhold and pay the tax. Where the transfer is effected by a Non-resident Holder without a permanent establishment in Korea, other than through a securities settlement company or a financial investment company with a brokerage license, the

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transferee is required to withhold the securities transaction tax. Failure to do so will result in the imposition of penalties equal to the sum of (i) between 10.0% to 60.0% of the tax amount due, depending on the nature of the improper reporting, and (ii) 9.125% per annum on the tax amount due for the default period.

Tax treaties

Korea has entered into a number of income tax treaties with other countries, including the United States, which reduce or exempt Korean withholding tax on dividend income and capital gains on transfer of common shares or ADSs. For example, under the Korea-U.S. income tax treaty, reduced rates of Korean withholding tax on dividends of 16.5% or 11%, respectively (including local income surtax), depending on your shareholding ratio, and an exemption from Korean withholding tax on capital gains are available to residents of the United States that are beneficial owners of the relevant dividend income or capital gains. However, under Article 17 (Investment or Holding Companies) of the Korea-U.S. income tax treaty, such reduced rates and exemption do not apply if (i) you are a U.S. corporation, (ii) by reason of any special measures, the tax imposed on you by the United States with respect to such dividends or capital gains is substantially less than the tax generally imposed by the United States on corporate profits, and (iii) 25% or more of your capital is held of record or is otherwise determined, after consultation between competent authorities of the United States and Korea, to be owned directly or indirectly by one or more persons who are not individual residents of the United States. Also, under Article 16 (Capital Gains) of the Korea-U.S. income tax treaty, the exemption on capital gains does not apply if you are an individual, and (A) you maintain a fixed base in Korea for a period or periods aggregating 183 days or more during the taxable year and your ADSs or common shares giving rise to capital gains are effectively connected with such fixed base, or (B) you are present in Korea for a period or periods of 183 days or more during the taxable year. You should inquire for yourself whether you are entitled to the benefit of an income tax treaty with Korea. It is the responsibility of the party claiming the benefits of an income tax treaty in respect of dividend payments or capital gains to submit to us, the purchaser or the financial investment company, as applicable, a certificate as to his tax residence. In the absence of sufficient proof, we, the purchaser, or the financial investment company, as applicable, must withhold tax at the normal rates.

Furthermore, in order for you to claim the benefit of a tax rate reduction or tax exemption on certain Korean source income (e.g., dividends and capital gains) under an applicable tax treaty, subject to certain exceptions, Korean tax law requires you (or your agent) as the beneficial owner of such Korean source income to submit the relevant application (Application for Entitlement to Reduced Tax Rate or Application for Tax Exemption, as the case may be) along with a certificate of your tax residency issued by a competent authority of your country of tax residence, or BO Application. Such application should be submitted to the withholding agent prior to the payment date of such Korean source income. Subject to certain exceptions, where the Korean source income is paid to an overseas investment vehicle that is not the beneficial owner of such income, or OIV, a beneficial owner claiming the benefit of an applicable tax treaty with respect to the Korean source income must submit its BO Application to such OIV, which must submit an OIV report and a schedule of beneficial owners to the withholding agent prior to the payment date of such Korean source income. In the case of an application for tax exemption, the withholding agent is required to submit the application (together with the applicable OIV report in the case of income paid to an OIV) to the relevant district tax office by the ninth day of the month following the date of the payment of such income. However, an owner of ADSs who is a non-resident of Korea is not required to submit such application, if the Korean source income from the ADSs is paid through an account opened at the Korea Securities Depository by a foreign depository.

U.S. federal income tax considerations for U.S. holders

The following discussion is a summary of U.S. federal income tax considerations generally applicable to the ownership and disposition of our common shares or ADSs by a U.S. holder (as defined below) that has acquired our common shares or ADSs. This summary is for general information purposes only and does not purport to be a complete discussion of all potential tax considerations that may be relevant to a particular person's decision to acquire common shares or ADSs.

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This summary is based on the U.S. Internal Revenue Code of 1986, as amended (the “Code”), the regulations promulgated under the Code (the “U.S. Treasury Regulations”), the income tax treaty between Korea and the United States (the “Treaty”), published rulings of the U.S. Internal Revenue Service (the “IRS”), published administrative positions of the IRS, and U.S. court decisions that are applicable and, in each case, as in effect and available, as of the date hereof. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive or prospective basis which could affect the U.S. federal income tax considerations described in this summary. We have not requested a ruling from the IRS with respect to any of the U.S. federal income tax considerations described below, and as a result, the IRS could disagree with portions of this discussion.

For purposes of this discussion, a “U.S. holder” is a beneficial owner of the common shares or ADSs that is, for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) that is created or organized in or under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is includable in gross income for U.S. federal income tax purposes regardless of its source; or
- a trust (i) the administration of which is subject to the primary supervision of a court within the United States and which has one or more U.S. persons who have the authority to control substantial decisions of the trust, or (ii) that has validly elected to be treated as a U.S. person under the Code.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds the common shares or ADSs, the U.S. federal income tax consequences to such partnership and its partners of the ownership and disposition of the common shares or ADSs generally will depend in part on the activities of the partnership and the status of such partners. This summary does not address the tax consequences to any such partner or partnership. Partners of entities or arrangements that are classified as partnerships for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences of the ownership and disposition of the common shares or ADSs.

This discussion applies only to a U.S. holder that holds common shares or ADSs as “capital assets” under the Code (generally, property held for investment). Unless otherwise provided, this summary does not discuss reporting requirements. In addition, this discussion does not address any tax consequences other than U.S. federal income tax consequences, such as U.S. state and local tax consequences, U.S. estate and gift tax consequences, and non-U.S. tax consequences, and does not describe all of the U.S. federal income tax consequences that may be relevant in light of a U.S. holder’s particular circumstances, including alternative minimum tax consequences, the Medicare tax on certain net investment income, and tax consequences to holders that are subject to special provisions under the Code, including, but not limited to, holders that:

- are tax exempt organizations, qualified retirement plans, individual retirement accounts, or other tax deferred accounts;
- are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies;
- are brokers or dealers in securities or currencies or holders that are traders in securities that elect to apply a mark-to-market accounting method;
- have a “functional currency” for U.S. federal income tax purposes that is not the U.S. dollar;
- own common shares or ADSs as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position;

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- acquire common shares or ADSs in connection with the exercise of employee stock options or otherwise as compensation for services;
- are partnerships or other pass-through entities for U.S. federal income tax purposes (or investors in such partnerships and entities);
- are required to accelerate the recognition of any item of gross income with respect to the common shares or ADSs as a result of such income being recognized on an applicable financial statement;
- own or will own (directly, indirectly, or constructively) 10% or more of our total combined voting power or value;
- hold the common shares or ADSs in connection with trade or business conducted outside of the United States or in connection with a permanent establishment or other fixed place of business outside of the United States; or
- are former U.S. citizens or former long-term residents of the United States.

Each U.S. holder is urged to consult its tax advisor regarding the application of U.S. federal taxation to its particular circumstances, and the state, local, non-U.S., and other tax considerations of the ownership and disposition of our common shares or ADSs.

ADSs

For U.S. federal income tax purposes, a U.S. holder of ADSs generally is treated as the beneficial owner of the underlying shares represented by the ADSs. The remainder of this discussion assumes that a U.S. holder of our ADSs is treated in this manner. Accordingly, deposits or withdrawals of common shares for ADSs generally will not be subject to U.S. federal income tax.

Passive foreign investment company considerations

A non-U.S. corporation, such as our company, is classified as a passive foreign investment company (“PFIC”) for any taxable year in which, after applying relevant look-through rules with respect to the income and assets of its subsidiaries, either: (i) 50% or more of the value of the corporation’s assets either produce passive income or are held for the production of passive income, based on the quarterly average of the fair market value of such assets; or (ii) at least 75% of the corporation’s gross income is passive income. “Passive income” generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions.

Based upon our current and projected income and assets and the valuation of our assets, including goodwill, we do not expect to be a PFIC for our current taxable year or the foreseeable future. However, the determination of whether any corporation was, or will be, a PFIC for a taxable year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, because the determination of whether a corporation will be a PFIC for any taxable year can only be made after the close of such taxable year, there can be no assurance that we will not be a PFIC for our current taxable year or any future taxable year.

We must make a separate determination each year as to whether we are a PFIC. As a result, our PFIC status may change. If we are a PFIC for any year during which you hold the common shares or ADSs, we will generally continue to be treated as a PFIC for all succeeding years during which you hold such common shares or ADSs. However, if we cease to be a PFIC, provided that you have not made a mark-to-market election, as described below, you may avoid some of the adverse effects of the PFIC regime by making a deemed sale election with respect to the common shares or ADSs, as applicable.

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The discussion below under “—*Distributions on the common shares or ADSs*” and “—*Sale or other disposition of the common shares or ADSs*” is written on the basis that we will not be classified as a PFIC for U.S. federal income tax purposes. The U.S. federal income tax rules that generally would apply if we are treated as a PFIC are discussed below under “—*Passive foreign investment company rules.*”

Distributions on the common shares or ADSs

The gross amount of any distributions paid on our common shares or ADSs will generally be included in the gross income of a U.S. holder as dividend income on the date actually or constructively received by the U.S. holder, in the case of common shares, or by the depositary, in the case of ADSs, but only to the extent that the distribution is paid out of our current or accumulated earnings and profits (computed on the basis of U.S. federal income tax principles). Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, we expect that distributions will generally be reported to U.S. holders as dividends. Dividends received on our common shares or ADSs will not be eligible for the dividends received deduction allowed to corporations in respect of dividends received from U.S. corporations.

Individuals and other non-corporate U.S. holders will be subject to tax on any such dividends at the lower capital gains tax rate applicable to “qualified dividend income,” provided that certain conditions are satisfied, including that (i) the common shares or ADSs on which the dividends are paid are readily tradable on an established securities market in the United States or we are eligible for the benefits of the Treaty, (ii) we are not a PFIC nor treated as such with respect to a U.S. holder (as discussed below) for either our taxable year in which the dividend was paid or for the preceding taxable year, and (iii) certain holding period requirements are met. For this purpose, ADSs listed on The NASDAQ Stock Market are generally considered to be readily tradable on an established securities market in the United States. You should consult your tax advisor regarding the availability of the lower rate for dividends paid with respect to our common shares or ADSs.

For U.S. foreign tax credit purposes, dividends paid on our common shares or ADSs generally will be treated as foreign source income and generally will constitute passive category income. The amount of a dividend will include any amounts withheld by us in respect of Korean income taxes. Subject to applicable limitations, some of which vary depending upon the U.S. holder’s particular circumstances, Korean income taxes withheld from dividends on the common shares or ADSs, at a rate not exceeding any reduced rate available pursuant to the Treaty, will be creditable against the U.S. holder’s U.S. federal income tax liability. In lieu of claiming a foreign tax credit, U.S. holders may, at their election, deduct foreign taxes, including any Korean income taxes, in computing their taxable income, subject to generally applicable limitations under U.S. law. An election to deduct foreign taxes instead of claiming foreign tax credits applies to all foreign taxes paid or accrued in the taxable year. The rules governing foreign tax credits are complex and U.S. holders should consult their tax advisers regarding the creditability or deductibility of foreign taxes in their particular circumstances.

The amount of any dividend paid in Korean Won will equal the U.S. dollar value of the Korean Won received calculated by reference to the exchange rate in effect on the date the dividend is received by you, in the case of common shares, or by the depositary, in the case of ADSs, regardless of whether the Korean Won are converted into U.S. dollars. If the Korean Won received as a dividend are converted into U.S. dollars on the date of receipt, a U.S. holder generally will not be required to recognize foreign currency gain or loss in respect of the dividend income. If the Korean Won received as a dividend are not converted into U.S. dollars on the date of receipt, a U.S. holder will have a basis in the Korean Won equal to their U.S. dollar value on the date of receipt. Any gain or loss realized on a subsequent conversion or other disposition of the Korean Won will be treated as U.S. source ordinary income or loss.

Sale or other disposition of the common shares or ADSs

A U.S. holder will recognize gain or loss on the sale or other disposition of a common share or ADS equal to the difference between the amount realized for the common share or ADS and the holder’s tax basis in

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the common share or ADS. Such gain or loss will generally be capital gain or loss and will be long-term capital gain or loss if the U.S. holder's holding period for such common share or ADS was more than one year as of the date of the sale or other disposition. Long-term capital gain recognized by a non-corporate U.S. holder is subject to U.S. federal income tax at rates lower than the rates applicable to ordinary income and short-term capital gains, while short-term capital gains are subject to U.S. federal income tax at the rates applicable to ordinary income. The deductibility of capital losses is subject to various limitations. Any gain or loss recognized will generally be U.S. source gain or loss for foreign tax credit purposes. Consequently, a U.S. holder may not be able to use the foreign tax credit arising from any Korean tax imposed on the disposition of the common share or ADS unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from non-U.S. sources.

Any Korean securities transaction tax will not be treated as a creditable foreign tax for U.S. federal income tax purposes, although a U.S. holder may be entitled to deduct such taxes, subject to applicable limitations under the Code.

Passive foreign investment company rules

If we are a PFIC for any taxable year during which you hold our common shares or ADSs, you will be subject to special tax rules with respect to any "excess distribution" that you receive and any gain you realize from a sale or other disposition (including a pledge) of the common shares or ADSs, unless you make a mark-to-market election as discussed below. Distributions you receive from us in a taxable year that are greater than 125% of the average annual distributions you received from us during the shorter of the three preceding taxable years or your holding period for the common shares or ADSs will be treated as an excess distribution. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for the common shares or ADSs,
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we became a PFIC, will be treated as ordinary income, and
- the amount allocated to each of the other taxable years would be subject to tax at the highest rate of tax in effect for you for such year and would be increased by an additional tax calculated as an interest charge on the resulting tax deemed deferred with respect to each such other taxable year at the rates generally applicable to underpayments of tax payable in those years.

If we are a PFIC for any taxable year during which a U.S. holder holds our common shares or ADSs and any of our subsidiaries or other corporate entities in which we own equity interests is also a PFIC, such U.S. holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of these rules. U.S. holders are urged to consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

As an alternative to the foregoing rules, a U.S. holder may make a mark-to-market election with respect to our common shares or ADSs, provided such common shares or ADSs are treated as "marketable stock." The common shares or ADSs generally will be treated as marketable stock if the common shares or ADSs are regularly traded on a "qualified exchange or other market," as defined in applicable U.S. Treasury Regulations. Our ADSs will be marketable stock as long as they remain listed on the NASDAQ Stock Market, which is a qualified exchange for this purpose, and are regularly traded. Consequently, a U.S. holder of common shares that are not represented by ADSs generally will not be eligible to make the mark-to-market election.

If a U.S. holder makes a valid mark-to-market election with respect to the ADSs, the holder generally will (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an

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ordinary loss in each such year the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but such deduction will only be allowed to the extent of the net amount previously included in income as a result of the mark-to-market election. The U.S. holder's adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. holder makes a mark-to-market election in respect of our ADSs and we cease to be classified as a PFIC, the holder will not be required to take into account the gain or loss described above during any period that we are not classified as a PFIC. If a U.S. holder makes a mark-to-market election, any gain such U.S. holder recognizes upon the sale or other disposition of our ADSs in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as ordinary loss, but such loss will only be treated as ordinary loss to the extent of the net amount previously included in income as a result of the mark-to-market election.

Because a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a U.S. holder may continue to be subject to the general PFIC rules described above with respect to such U.S. holder's indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes.

We do not intend to provide information necessary for U.S. holders to make qualified electing fund elections which, if available, would result in tax treatment different from (and generally less adverse than) the general tax treatment for PFICs described above.

If a U.S. holder owns common shares or ADSs during any year in which we are a PFIC, the holder generally must file an annual report containing such information as the U.S. Treasury may require on IRS Form 8621 (or any successor form). A failure to file this report generally will suspend the statute of limitations with respect to any tax return, event, or period to which such report relates (potentially including with respect to items that do not relate to a U.S. holder's investment in common shares or ADSs).

The PFIC rules are complex, and each U.S. holder should consult its own tax advisor regarding the PFIC rules, the elections which may be available to it, and how the PFIC rules may affect the U.S. federal income tax consequences relating to the ownership and disposition of common shares or ADSs.

Information reporting and backup withholding

Payments of dividends or sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries may be subject to information reporting and backup withholding, unless (i) the U.S. holder is a corporation or other exempt recipient, or (ii) in the case of backup withholding, the U.S. holder provides a correct U.S. taxpayer identification number and certifies that it is not subject to backup withholding.

Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding rules will be allowed as a credit against a U.S. holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. holder furnishes required information to the IRS in a timely manner. Each U.S. holder should consult its own tax advisor regarding the information reporting and backup withholding rules in their particular circumstances and the availability of and procedures for obtaining an exemption from backup withholding.

Reporting obligations for certain owners of foreign financial assets

Certain U.S. holders may be required to file information returns with respect to their investment in common shares or ADSs. For example, U.S. return disclosure obligations (and related penalties) are imposed on individuals who are U.S. holders that hold certain specified foreign financial assets in excess of certain thresholds. The definition of "specified foreign financial assets" includes not only financial accounts maintained in non-U.S. financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an

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issuer or counterparty other than a U.S. person, and any interest in a non-U.S. entity. U.S. holders may be subject to these reporting requirements unless their common shares or ADSs are held in an account at certain financial institutions.

The discussion of reporting obligations set forth above is not intended to constitute an exhaustive description of all reporting obligations that may apply to a U.S. holder. A failure to satisfy certain reporting obligations may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting obligation. Penalties for failure to comply with these reporting obligations are substantial. U.S. holders should consult with their own tax advisors regarding their reporting obligations under these rules, including the requirement to file an IRS Form 8938.

THE DISCUSSION ABOVE IS A GENERAL SUMMARY. IT DOES NOT COVER ALL TAX MATTERS THAT MAY BE OF IMPORTANCE TO A PROSPECTIVE INVESTOR. EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS OWN TAX ADVISOR ABOUT THE TAX CONSEQUENCES RELATING TO THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON SHARES AND ADSS IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We are subject to the information reporting requirements of the Exchange Act applicable to foreign private issuers and under those requirements will file reports with the SEC. Those reports may be inspected without charge on the websites described below. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and the our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act.

We maintain a corporate website at://doubledowninteractive.com/. We intend to post this annual report on our website promptly following it being filed with the SEC. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report. We have included our website address in this annual report solely as an inactive textual reference.

The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants, such as our Company, that file electronically with the SEC.

With respect to references made in this annual report to any contract or other document relating to our Company, such references are not necessarily complete and you should refer to the exhibits attached or incorporated by reference to this annual report for copies of the actual contract or document.

I. Subsidiary Information

Not applicable.

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Exchange rate risk

We operate globally and, as such, we are subject to foreign exchange risk in our commercial operations, as well as in our investments and borrowings. Our functional currency is the Korean Won and most of our operations and revenues are in U.S. dollars. Our investments in our non-Korean subsidiaries are also subject to currency risk. We seek to manage our foreign exchange risk, in part, through operational means, including managing same-currency revenues in relation to same-currency costs, and same currency assets in relation to same-currency liabilities. Where foreign exchange risk cannot be mitigated through operational means, we may use foreign currency forward-exchange contracts or swaps to manage that risk. The fair values of our financial instruments are analyzed at year-end to determine their sensitivity to foreign exchange rate changes. In this sensitivity analysis, assuming that a change in one currency's rate relative to the U.S. dollar would have an effect on another currency's rates relative to the U.S. dollar, if the U.S. dollar were to appreciate against the Korean Won by 10%, as of December 31, 2021, the expected adverse impact on our net income would not be significant.

Interest rate risk

We are subject to interest rate risk on our borrowings. We manage interest rate risk in the aggregate, focusing on our immediate and intermediate liquidity needs. We borrow mainly on a long-term, fixed-rate basis. The fair values of our financial instruments are analyzed at year-end to determine their sensitivity to interest rate changes. In this analysis, and assuming a shift in the interest rate curve for all maturities and all instruments, if there were a 100 point decrease in interest rates as of December 31, 2021, the expected adverse impact on our net income would not be significant.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Citibank, N.A., as depositary, registers and delivers American Depositary Shares, also referred to as ADSs. Twenty ADSs represent one common share (or a right to receive one common share) deposited with Korea Securities Depository, as custodian for the depositary in Korea. Each ADS also represents any other securities, cash or other property that may be held by the depositary. The deposited shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities. The depositary's office at which the ADSs are administered and its principal executive office are located at 388 Greenwich Street, New York, New York 10013.

The form of deposit agreement for the ADSs and the form of ADRs that represents an ADS have been incorporated by reference as exhibits to this annual report.

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Fees and charges

As an ADS holder, you will be required to pay the following fees under the terms of the deposit agreement:

Service	Fees
• Issuance of ADSs (e.g., an issuance of ADSs upon a deposit of common shares, upon a change in the ADS-to-common share ratio, or for any other reason), excluding ADS issuances as a result of distributions of common shares)	Up to \$0.05 per ADS issued
• Cancellation of ADSs (e.g., a cancellation of ADSs for delivery of deposited property, upon a change in the ADS-to-common share ratio, or for any other reason)	Up to \$0.05 per ADS cancelled
• Distribution of cash dividends or other cash distributions (e.g., upon a sale of rights and other entitlements)	Up to \$0.05 per ADS held
• Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) exercise of rights to purchase additional ADSs	Up to \$0.05 per ADS held
• Distribution of securities other than ADSs or rights to purchase additional ADSs (e.g., upon a spin-off)	Up to \$0.05 per ADS held
• ADS Services	Up to \$0.05 per ADS held on the applicable record date(s) established by the depository bank
• Registration of ADS transfers (e.g., upon a registration of the transfer of registered ownership of ADSs, upon a transfer of ADSs into DTC and <i>vice versa</i> , or for any other reason)	Up to \$0.05 per ADS (or fraction thereof) transferred
• Conversion of ADSs of one series for ADSs of another series (e.g., upon conversion of Partial Entitlement ADSs for Full Entitlement ADSs, or upon conversion of Restricted ADSs (each as defined in the Deposit Agreement) into freely transferable ADSs, and <i>vice versa</i>)	Up to \$0.05 per ADS (or fraction thereof) converted

As an ADS holder you will also be responsible to pay certain charges such as:

- taxes (including applicable interest and penalties) and other governmental charges;
- the registration fees as may from time to time be in effect for the registration of common shares on the share register and applicable to transfers of common shares to or from the name of the custodian, the depository bank, or any nominees upon the making of deposits and withdrawals, respectively;
- certain cable, telex, and facsimile transmission and delivery expenses;
- the fees, expenses, spreads, taxes, and other charges of the depository bank and/or service providers (which may be a division, branch, or affiliate of the depository bank) in the conversion of foreign currency;
- the reasonable and customary out-of-pocket expenses incurred by the depository bank in connection with compliance with exchange control regulations and other regulatory requirements applicable to common shares, ADSs, and ADRs; and
- the fees, charges, costs, and expenses incurred by the depository bank, the custodian, or any nominee in connection with the ADR program.

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ADS fees and charges for (i) the issuance of ADSs, and (ii) the cancellation of ADSs are charged to the person for whom the ADSs are issued (in the case of ADS issuances) and to the person for whom ADSs are cancelled (in the case of ADS cancellations). In the case of ADSs issued by the depositary bank into DTC, the ADS issuance and cancellation fees and charges may be deducted from distributions made through DTC, and may be charged to the DTC participant(s) receiving the ADSs being issued or the DTC participant(s) holding the ADSs being cancelled, as the case may be, on behalf of the beneficial owner(s) and will be charged by the DTC participant(s) to the account of the applicable beneficial owner(s) in accordance with the procedures and practices of the DTC participants as in effect at the time. ADS fees and charges in respect of distributions and the ADS service fee are charged to the holders as of the applicable ADS record date. In the case of distributions of cash, the amount of the applicable ADS fees and charges is deducted from the funds being distributed. In the case of (i) distributions other than cash and (ii) the ADS service fee, holders as of the ADS record date will be invoiced for the amount of the ADS fees and charges and such ADS fees and charges may be deducted from distributions made to holders of ADSs. For ADSs held through DTC, the ADS fees and charges for distributions other than cash and the ADS service fee may be deducted from distributions made through DTC and may be charged to the DTC participants in accordance with the procedures and practices prescribed by DTC, and the DTC participants in turn charge the amount of such ADS fees and charges to the beneficial owners for whom they hold ADSs. In the case of (i) registration of ADS transfers, the ADS transfer fee will be payable by the ADS Holder whose ADSs are being transferred or by the person to whom the ADSs are transferred, and (ii) conversion of ADSs of one series for ADSs of another series, the ADS conversion fee will be payable by the holder whose ADSs are converted or by the person to whom the converted ADSs are delivered.

In the event of refusal to pay the depositary bank fees, the depositary bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depositary bank fees from any distribution to be made to the ADS holder. Certain depositary fees and charges (such as the ADS services fee) may become payable shortly after the acquisition of the ADSs. Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depositary bank. You will receive prior notice of such changes. The depositary bank may reimburse us for certain expenses incurred by us in respect of the ADR program, by making available a portion of the ADS fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depositary bank agree from time to time.

PART II.

ITEM 13. DEFAULTS, DIVIDENDS ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

None.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We have performed an evaluation of the effectiveness of our disclosure controls and procedures that are designed to ensure that the material financial and non-financial information required to be disclosed to the SEC is recorded, processed, summarized and reported timely. Based on our evaluation, our management, including the chief executive officer and chief financial officer, has concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended) as of the end of the period covered by this report, were effective.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) under the Securities Exchange Act of 1934, as amended). Our management evaluated the effectiveness of our internal control over financial reporting based on criteria established in the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of December 31, 2021.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. In addition, projections of any evaluation of effectiveness of our internal control over financial reporting 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 and procedures may deteriorate.

Attestation report of the registered public accounting firm

This annual report does not include an attestation report of the company’s registered public accounting firm pursuant to rules of the SEC whereby domestic and foreign registrants that are non-accelerated filers and who qualify as an “emerging growth companies” under Section 3(a) of the Exchange Act are not required to provide the auditor attestation report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2021 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

For information regarding our audit committee financial expert, see “Item 6C. Board practices.”

ITEM 16B. CODE OF ETHICS

Our board of directors have adopted a written code of ethics that applies to our directors, officers, and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and other of our agents. Our code of ethics is available on our website at <https://doubledowninteractive.com>. If we amend the provisions of our code of ethics that apply to our directors, corporate auditors, officers, and employees (including our principal executive officer, principal financial officer, principal accounting officer or controller, and other persons performing similar functions), and our agents, or if we grant any waiver of such provisions, we will disclose such amendment or waiver on our website at the same address.

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Ernst & Young LLP (which we refer to as “E&Y”) has served as our independent registered public accounting firm for the years ended December 31, 2021 and 2020. The following table sets out the aggregate fees for professional audit services and other services rendered by E&Y for each of the years ended December 31, 2021 and 2020:

(in thousands)	Year ended December 31,	
	2021	2020
Audit Fees ⁽¹⁾	\$ 1,600	\$ 2,162
Audit-Related Fees ⁽²⁾	\$ 0	\$ 0
Tax Fees ⁽³⁾	\$ 110	\$ 217
Other Fees ⁽⁴⁾	\$ 0	\$ 2

- (1) “Audit fees” means the aggregate fees incurred for professional services rendered by E&Y for the audit of our annual financial statements and in connection with the initial public offering of the ADSs.
- (2) “Audit-related fees” means the aggregate fees for due diligence related to mergers and acquisitions and attest services that are not required by statute or regulation.
- (3) “Tax fees” means the fees billed for tax compliance services, including the preparation of tax returns and tax consultations.
- (4) “Other Fees” means the fees paid for access to a proprietary accounting research tool provided by E&Y.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by our independent registered public accounting firm, including audit services, audit-related services, tax services and other services as described above, other than those for de minimis services which are approved by our audit committee prior to the completion of the audit.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Under Korean law, a company may have a statutory auditor or an audit committee of three directors, two of whom must be independent. Consistent with requirements of Korean law, we have an audit committee consisting of three directors, two of whom are independent. For foreign private issuers, use of a board of auditors (or similar body) in compliance with home country rules is permitted under Rule 10A-3(c)(3) of the Exchange Act. Our reliance on Rule 10A-3(c)(3) does not, in our opinion, materially adversely affect the ability of our board of corporate auditors to act independently and to satisfy the other requirements of Rule 10A-3.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

None.

ITEM 16F. CHANGE IN REGISTRANT’S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

We are a “foreign private issuer” under the federal securities laws of the United States and the NASDAQ listing standards. Under the federal securities laws of the United States, foreign private issuers are subject to different disclosure requirements than U.S.-domiciled registrants. We intend to take all actions necessary for us to maintain compliance as a foreign private issuer under the applicable corporate governance requirements of the Sarbanes-Oxley Act, the rules adopted by the SEC and the NASDAQ listing standards. Under the SEC rules and the NASDAQ listing standards, a foreign private issuer is subject to less stringent corporate governance requirements. Subject to certain exceptions, the SEC and the NASDAQ permit a foreign private issuer to follow its home country practice in lieu of their respective rules and listing standards. In particular, as a foreign private issuer, we will follow Korean law and corporate practice in lieu of the corporate governance provisions set out under NASDAQ Rule 5600, the requirement in Rule 5250(b)(3) to disclose third party director and nominee compensation, and the requirement in Rule 5250(d) to distribute annual and interim reports. Of particular note, the following rules under NASDAQ Rule 5600 differ from Korean law requirements:

- NASDAQ Rule 5605(b)(1) requires that at least a majority of the Company’s board of directors shall be independent directors, and NASDAQ Rule 5605(b)(2) requires that independent directors regularly meet in executive session, where only independent directors are present. We currently have two independent directors, who meet regularly with other members of the board. We intend to appoint more independent directors over time, and they may choose to meet in executive session at their discretion.
- NASDAQ Rule 5620(c) sets out a quorum requirement of 33-1/3% applicable to meetings of shareholders. In accordance with Korean law and generally accepted business practices, our articles of incorporation provide for a 25% quorum requirement that are generally applicable to meetings of shareholders.
- NASDAQ Rule 5605(c)(2)(A) requires that the Company shall have an audit committee composed entirely of not less than three directors, each of whom must be independent. Under Korean law, a company may have a statutory auditor or an audit committee of three directors, two of whom must be independent. We currently have a committee of three directors, and two of the directors meet the requirements of Rule 10A-3 under the Exchange Act. See “Item 6A. Director and senior management—Audit committee.”
- NASDAQ Rule 5605(d) requires, among other things, that the Company’s compensation committee is comprised of at least two members, each of whom is an independent director as defined under such rule. There is no similar requirement under Korean law. Our board of directors will together participate in the strategic discussions and determination of directors and executive compensation and other compensation-related matters.
- NASDAQ Rule 5605(e) requires that the nomination and corporate governance committee be comprised solely of independent directors. We will not have a standalone nomination and corporate governance committee. Our board of directors together participates in the nomination process and oversees the corporate governance practices of the Company.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III.

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18 below.

ITEM 18. FINANCIAL STATEMENTS

The audited consolidated financial statements for the years ended December 31, 2021, 2020 and 2019 are found at the end of this annual report, beginning on page F-1.

ITEM 19. EXHIBITS

EXHIBIT INDEX

<u>Exhibit</u>	<u>Description</u>
1.1	Amended and Restated Articles of Incorporation of the Registrant (English translation), filed as Exhibit 3.1 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.
2.1	Form of Deposit Agreement among the Registrant, the depository, and holders of the American Depositary Receipts, filed as Exhibit 4.1 to Amendment No. 1 to Form F-1 (File No. 333-238884) filed on June 18, 2020 and incorporated herein by reference.
2.2	Specimen American Depositary Receipt of the Registrant, included as Exhibit A in Exhibit 4.1 to Amendment No. 1 to Form F-1 (File No. 333-238884) filed on June 18, 2020 and incorporated herein by reference.
2.3	Description of Securities, filed as Exhibit 2.3 to the Annual Report on Form 20-F filed with the SEC on April 30, 2021 and incorporated herein by reference.
4.1+	Game Development, Distribution and Services Agreement, dated as of June 1, 2017, by and between DoubleUDiamond, LLC and International Game Technology, filed as Exhibit 10.1 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.
4.2+	First Amendment to Game Development, Distribution and Services Agreement, dated as of October 4, 2018, by and between DoubleUDiamond, LLC and International Game Technology, filed as Exhibit 10.2 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.
4.3+	Game License Agreement (DoubleU Games Co., Ltd.), dated as of March 7, 2018, by and between DoubleU Games Co., Ltd., as licensor, and the Registrant, as licensee (English translation), filed as Exhibit 10.3 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.
4.4+	Game License Agreement (DoubleUDiamond, LLC), dated as of November 30, 2018, by and between DoubleUDiamond, LLC, as licensor, and DoubleU Games Co., Ltd., as licensee, filed as Exhibit 10.4 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.
4.5+	First Amendment to Game License Agreement (DoubleU Games Co., Ltd.), dated as of July 1, 2019, by and between DoubleU Games Co., Ltd. as licensor, and the Registrant, as licensee (English translation), filed as Exhibit 10.5 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.

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<u>Exhibit</u>	<u>Description</u>
4.6	<u>Second Amendment to Game License Agreement (DoubleU Games Co., Ltd.), dated as of November 27, 2019, by and between DoubleU Games Co., Ltd., as licensor, and the Registrant, as licensee (English translation), filed as Exhibit 10.6 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
4.7	<u>Loan Agreement, dated as of May 25, 2018, by and between DoubleU Games Co., Ltd., as creditor and the Registrant, as debtor (English translation), filed as Exhibit 10.7 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
4.8	<u>Loan Agreement, dated as of August 27, 2018, by and between DoubleU Games Co., Ltd., as creditor and the Registrant, as debtor (English translation), filed as Exhibit 10.8 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
4.9	<u>Loan Agreement, dated as of November 26, 2018, by and between DoubleU Games Co., Ltd., as creditor and the Registrant, as debtor (English translation), filed as Exhibit 10.9 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
4.10	<u>Loan Agreement, dated as of February 25, 2019, by and between DoubleU Games Co., Ltd., as creditor and the Registrant, as debtor (English translation), filed as Exhibit 10.10 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
4.11	<u>Loan Agreement, dated as of May 27, 2019, by and between DoubleU Games Co., Ltd., as creditor and the Registrant, as debtor (English translation), filed as Exhibit 10.11 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
4.12+	<u>Second Amendment to Game Development, Distribution and Services Agreement, dated as of May 30, 2020, by and between DoubleUDiamond, LLC and International Game Technology), filed as Exhibit 10.12 to Post-Effective Amendment No. 1 to Registration Statement on Form F-1 (File No. 333-238884) filed on March 29, 2021 and incorporated herein by reference.</u>
4.13	<u>Joint Investment Agreement, dated as of April 11, 2017, by and between DoubleU Games Co., Ltd. and STIC Special Situation Private Equity Fund (English translation), filed as Exhibit 99.1 to Registration Statement on Form F-1 (File No. 333-258032) filed with the Commission on July 20, 2021 and incorporated herein by reference.</u>
4.14	<u>Supplemental Agreement to the Joint Investment Agreement, dated as of July 16, 2021, by and between DoubleU Games Co., Ltd. and STIC Special Situation Private Equity Fund (English translation), filed as Exhibit 99.2 to Registration Statement on Form F-1 (File No. 333-258032) filed with the Commission on July 20, 2021 and incorporated herein by reference.</u>
4.15	<u>Supplemental Agreement No. 2 to the Joint Investment Agreement, dated as of July 27, 2021, by and between DoubleU Games Co., Ltd. and STIC Special Situation Private Equity Fund (English translation), filed as Exhibit 99.3 to Amendment No. 1 to Registration Statement on Form F-1/A (File No. 333-258032) filed with the Commission on August 20, 2021 and incorporated herein by reference.</u>
4.16+	<u>Mobile Game Distribution and Servicing Agreement, effective June 1, 2021, by and between DoubleU Games Co., Ltd. and DoubleDown Interactive LLC, filed herewith.</u>
8.1	<u>List of Subsidiaries of the Registrant, filed as Exhibit 21.1 to Registration Statement on Form F-1 (File No. 333-238884) filed on June 2, 2020 and incorporated herein by reference.</u>
11.1	<u>Code of Ethics and Business Conduct of the Registrant, filed as Exhibit 11.1 to the Annual Report on Form 20-F filed with the Commission on April 30, 2021 and incorporated herein by reference.</u>

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<u>Exhibit</u>	<u>Description</u>
12.1	Certification of the Chief Executive Officer pursuant to rule 13a-14(a) of the Securities Exchange Act of 1934, filed herewith.
12.2	Certification of the Chief Financial Officer pursuant to rule 13a-14(a) of the Securities Exchange Act of 1934, filed herewith.
13.1	Certification of the Chief Executive Officer pursuant to 18 U.S.C. 1350, furnished herewith.
13.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. 1350, furnished herewith.
101.INS	Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibits 101)

+ Portions of this exhibit indicated by asterisks have been omitted because the Registrant has determined they are not material and would likely cause competitive harm if publicly disclosed.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

DOUBLEDOWN INTERACTIVE CO., LTD.

April 4, 2022

By: /s/ In Keuk Kim
Name: In Keuk Kim
Title: Chief Executive Officer

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Consolidated financial statements (as adjusted)
December 31, 2021, 2020 and 2019
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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of DoubleDown Interactive Co., Ltd.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of DoubleDown Interactive Co., Ltd. (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income and comprehensive income, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2019.

Seattle, WA

April 4, 2022

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DoubleDown Interactive Co., Ltd.
Consolidated Statements of Income and Comprehensive Income
(in thousands of U.S. Dollars, except per share amounts)

	Years ended December 31,		
	2021	2020	2019
Revenue	\$ 363,205	\$ 358,342	\$ 273,610
Operating expenses:			
Cost of revenue ⁽¹⁾	126,612	126,255	99,620
Sales and marketing ⁽¹⁾	78,821	71,225	35,827
Research and development ⁽¹⁾	18,490	18,784	19,245
General and administrative ⁽¹⁾	22,631	21,721	17,198
Depreciation and amortization	17,918	31,574	33,422
Total operating expenses	264,472	269,559	205,312
Operating income	98,733	88,783	68,298
Other income (expense):			
Interest expense	(2,011)	(10,786)	(26,566)
Interest income	208	197	524
Gain on foreign currency transactions	1,110	2,347	4,128
Gain (loss) on foreign currency remeasurement	1,920	(244)	3,206
Other, net	654	(5,080)	277
Total other income (expense), net	1,881	(13,566)	(18,431)
Income before income tax	100,614	75,217	49,867
Income tax expense	(22,506)	(21,594)	(13,542)
Net income	\$ 78,108	\$ 53,623	\$ 36,325
Other comprehensive income (expense):			
Pension adjustments, net of tax	(286)	(294)	(385)
Gain (loss) on foreign currency translation	504	13,676	9,742
Comprehensive income	\$ 78,326	\$ 67,005	\$ 45,682
Earnings per share:			
Basic	\$ 33.91	\$ 29.67	\$ 30.46
Diluted	\$ 33.91	\$ 26.20	\$ 21.87
Weighted average shares outstanding:			
Basic	2,303,200	1,807,410	1,192,725
Diluted	2,303,200	2,149,114	1,995,131

(1) Excluding depreciation and amortization

See accompanying notes to consolidated financial statements.

[Table of Contents](#)**DoubleDown Interactive Co., Ltd.**
Consolidated Balance Sheets
(in thousands of U.S. Dollars)

	Years ended December 31,	
	2021	2020
Assets		
Current assets:		
Cash and cash equivalents	\$ 242,060	\$ 63,188
Accounts receivable, net	21,875	23,299
Prepaid expenses, and other assets	6,817	4,020
Total current assets	270,752	90,507
Property and equipment, net	384	377
Operating lease right-of-use assets, net	6,830	9,987
Intangible assets, net	53,679	71,364
Goodwill	633,965	633,965
Deferred tax asset	2,616	560
Other non-current assets	1,582	71
Total assets	\$ 969,808	\$ 806,831
Liabilities and Shareholders' Equity		
Short-term senior note	\$ —	\$ —
Accounts payable and accrued expenses	14,752	16,646
Short-term operating lease liabilities	3,076	3,033
Income taxes payable	—	2,838
Contract liabilities	2,246	2,415
Other current liabilities	730	717
Total current liabilities	20,804	25,649
Bonds	—	—
Long-term borrowings with related party	42,176	45,956
Long-term operating lease liabilities	4,688	7,831
Deferred tax liabilities, net	28,309	20,154
Other non-current liabilities	9,953	7,730
Total liabilities	105,930	107,320
Shareholders' equity		
Common Stock, KRW 10,000 par value - 200,000,000 Shares, 2,477,672 and 2,214,522 shares issued and outstanding	21,198	18,924
Additional paid-in-capital	671,831	588,064
Accumulated other comprehensive income	23,033	22,815
Retained earnings	147,816	69,708
Total shareholders' equity	863,878	699,511
Total liabilities and shareholders' equity	\$ 969,808	\$ 806,831

See accompanying notes to consolidated financial statements.

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DoubleDown Interactive Co., Ltd.
Consolidated Statements of Changes in Shareholders' Equity
(in thousands of U.S. Dollars, except share amounts)

	Common shares	Common stock	Additional paid-in- capital	Accumulated other comprehensive income/(loss)	Retained earnings (deficit)	Total shareholders' equity
As of January 1, 2019	1,192,725	\$ 10,603	\$ 339,423	\$ 76	\$ (20,240)	\$ 329,862
Net Income	—	—	—	—	36,325	36,325
Pension adjustments, net of tax	—	—	—	(385)	—	(385)
Capital investment from parent	—	—	5,124	—	—	5,124
Gain(loss) on foreign currency translation, net of tax	—	—	—	9,742	—	9,742
As of December 31, 2019	1,192,725	\$ 10,603	\$ 344,547	\$ 9,433	\$ 16,085	\$ 380,668
Net Income	—	—	—	—	53,623	53,623
Pension adjustments, net of tax	—	—	—	(294)	—	(294)
Capital investment from parent	—	—	369	—	—	369
Gain(loss) on foreign currency translation, net of tax	—	—	—	13,676	—	13,676
Exercise of warrants	306,539	2,496	61,878	—	—	64,374
Conversion of convertible bonds	715,258	5,825	181,270	—	—	187,095
As of December 31, 2020	2,214,522	\$ 18,924	\$ 588,064	\$ 22,815	\$ 69,708	\$ 699,511
Net Income	—	—	—	—	78,108	78,108
Pension adjustments, net of tax	—	—	—	(286)	—	(286)
Gain(loss) on foreign currency translation	—	—	—	504	—	504
Issuance of shares in IPO	263,150	2,274	83,767	—	—	86,041
As of December 31, 2021	2,477,672	\$ 21,198	\$ 671,831	\$ 23,033	\$ 147,816	\$ 863,878

See accompanying notes to consolidated financial statements.

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DoubleDown Interactive Co., Ltd.
Consolidated Statements of Cash Flows
(in thousands of U.S Dollars)

	Year ended December 31,		
	2021	2020	2019
Cash flow from operating activities:			
Net Income	\$ 78,108	\$ 53,623	\$ 36,325
Adjustments to reconcile net income to net cash from operating activities:			
Depreciation and amortization	17,918	31,574	33,422
Gain (Loss) on foreign currency remeasurement	(2,082)	244	(3,206)
Deferred taxes	5,976	4,422	2,706
Non-cash interest expense	23	5,103	12,874
Working capital adjustments:			
Accounts receivable	1,638	(4,099)	(3,680)
Prepaid expenses, other current and non-current assets	(2,950)	(204)	(870)
Accounts payable, accrued expenses and other payables	(2,052)	5,835	(1,630)
Contract liabilities	(168)	609	(112)
Income tax payable	(2,838)	2,689	(1,749)
Other current and non-current liabilities	2,532	54	2,582
Net cash flows provided by operating activities	96,105	99,850	76,662
Cash flow from (used in) investing activities:			
Acquisition of Double8 Games Co., Ltd.	—	(1,952)	—
Acquisition of financial assets (investments)	(1,541)	—	—
Purchases of intangible assets	(61)	(6)	—
Purchases of property and equipment	(207)	(217)	(200)
Disposals of property and equipment	3	—	—
Net cash flows from (used in) investing activities	(1,806)	(2,175)	(200)
Cash flows from (used in) financing activities:			
Proceeds from capital investment from parent	—	—	5,124
Proceeds received from short-term borrowings	—	—	68,631
Proceeds received from long-term borrowings with related parties	—	—	17,158
Repayments of long-term borrowings with related party	—	(42,371)	—
Issuance of new shares-IPO, net of IPO cost	86,041	—	—
Repayments of short-term senior note	—	(33,897)	(152,704)
Net cash flows used in financing activities	86,041	(76,268)	(61,791)
Net foreign exchange difference on cash and cash equivalents	(1,468)	(637)	(3,217)
Net increase (decrease) in cash and cash equivalents	178,872	20,770	11,454
Cash and cash equivalents at beginning of period	63,188	42,418	30,964
Cash and cash equivalents at end of period	\$242,060	\$ 63,188	\$ 42,418
Supplemental disclosures of cash flow information			
Noncash financing activity:			
Conversion of 2.5% Convertible bonds, net of tax	—	187,095	—
Conversion of 2.5% Non-convertible bonds with warrants, net of tax	—	64,374	—
Cash paid during year for:			
Interest	\$ 0	\$ 5,891	\$ 9,779
Income taxes	\$ 18,819	\$ 12,546	\$ 10,196

See accompanying notes to consolidated financial statements

DoubleDown Interactive Co, Ltd.
Notes to Consolidated Financial Statements

Note 1: Description of business

Background and nature of operations

DoubleDown Interactive Co., Ltd. (“DDI,” “we,” “us,” “our” or “the Company,” formerly known as The8Games Co., Ltd.) was incorporated in 2008 in Seoul, Korea as an interactive entertainment studio, focused on the development and publishing of casual games and mobile applications. DDI is a subsidiary of DoubleU Games Co., Ltd. (“DUG” or “DoubleU Games”), a Korean company and our controlling shareholder holding 67.1% of our outstanding shares. The remaining 32.9% of our outstanding shares are held by STIC Special Situation Private Equity Fund (“STIC”, 22.3%) and the remainder by participants in our IPO (10.6%). In 2017, DDI acquired DoubleDown Interactive, LLC (“DDI-US”) from International Gaming Technologies (“IGT”) for approximately \$825 million. DDI-US, with its principal place of business located in Seattle, Washington, is our primary revenue-generating entity.

We develop and publish digital gaming content on various mobile and web platforms through our multi-format interactive all-in-one game experience concept. We host DoubleDown Casino, DoubleDown Classic, DoubleDown Fort Knox and Undead World within various formats.

Initial Public Offering

On September 2, 2021, DoubleDown Interactive Co., Ltd. filed its initial public offering (the “Offering”) of 6,316,000 American Depositary Shares (the “ADSs”), each representing 0.05 common share, with par value of ₩10,000 per share, of the Company, at a price to the public of \$18.00 per ADS, before underwriting discounts and commissions. The number of ADSs sold by the Company was 5,263,000, and the number of ADSs sold by STIC Special Situation Diamond Limited, the selling shareholder in the Offering (the “Selling Shareholder”), was 1,053,000. The net proceeds to us from this offering was approximately \$86.0 million, after deducting the underwriting discounts and commissions and the offering expenses in the aggregate of approximately \$8.7 million payable by us.

We intend to use the net proceeds from this offering for working capital and general corporate purposes, which may include potential payments that could result from resolution of pending legal proceedings.

Prior to this offering, there has been no public market for our common shares or ADSs. Our ADSs trade on the NASDAQ Stock Market (“NASDAQ”) under the symbol “DDI.”

Acquisition of Double8 Games Co., Ltd. (“Double8 Games”)

On February 25, 2020, we completed the acquisition of Double8 Games Co., Ltd. (“Double8 Games”) from DoubleU Games in exchange for KRW2.3 billion (US\$2.0 million). Double8 Games is based in Seoul, Korea, with the primary business of developing digital gaming content for international markets. The acquisition was considered a business combination among entities under common control and, therefore, the transfer of net assets was recorded at their carrying value with all financial information prior to the acquisition adjusted for comparability.

Assets acquired and liabilities assumed primarily consist of working capital items, including a right of use asset and lease obligation. The difference between the cash paid and carrying value of the net assets received was recorded as a capital investment from parent.

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Note 2: Significant accounting policies

Basis of preparation and consolidation

The accompanying consolidated financial statements are presented in conformity with accounting principles generally accepted in the United States of America ("GAAP") and include the accounts of DDI and its controlled subsidiaries. All significant intercompany transactions, balances and unrealized gains or losses have been eliminated.

Use of estimates

The preparation of financial statements in conformity with GAAP requires estimates and assumptions that affect the reported amounts of assets and liabilities, revenues and expenses, and related disclosures. We regularly evaluate estimates and assumptions related to provisions for income taxes, revenue recognition, expense accruals, deferred income tax asset valuation allowances, valuation of goodwill and intangibles, and legal contingencies. We base our estimates and assumptions on current facts, historical experience and various other factors that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities and the accrual of costs and expenses that are not readily apparent from other sources. The actual results experienced may differ materially and adversely from these estimates. To the extent there are material differences between the estimates and the actual results, future operating results may be affected.

Functional currency and translation of financial statements

Our functional currency is the Korean Won ("KRW") and the U.S. Dollar ("dollar," "USD," "US\$," or "\$") is the functional currency of our United States subsidiaries. The accompanying consolidated financial statements are presented in USD. The consolidated balance sheets have been translated at the exchange rates prevailing at each balance sheet date. The consolidated statement of comprehensive income and statement of cash flows have been translated using the weighted-average exchange rates prevailing during the periods of each statement. The equity capital is denominated in the functional currency, KRW, and is translated at historical exchange rates. All translation adjustments resulting from translating into the reporting currency are accumulated as a separate component of accumulated other comprehensive income in shareholders' equity. Gains or losses resulting from foreign currency transactions are included in other income (expense).

Intercompany monetary items denominated in foreign currencies are translated into the functional currency at the exchange rate at the reporting date with the gain or loss arising on translation recorded to other income (expense). Intercompany non-monetary items that are measured at historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions. When we parenthetically disclose USD amounts for certain financial instruments denominated in KRW for the benefit of the reader, we use the exchange rates in effect as of December 31, 2021, unless otherwise noted.

Cash and cash equivalents

We consider all money market funds and short-term investments with a maturity of three months or less when acquired to be cash and cash equivalents. Cash and cash equivalents are held by high credit quality financial institutions and balances may exceed limits of federal insurance. We have not experienced any losses resulting from these excess deposits.

Financial instruments and concentration of credit risk

Financial instruments, which potentially expose us to concentrations of credit risk, consist primarily of cash and cash equivalents and accounts receivable.

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Accounts receivable are recorded and carried at the net invoiced amount, which is net of platform payment processing fees, unsecured, and represent amounts due to us based on contractual obligations where an executed contract exists. We do not require collateral and have not recognized an allowance as management estimates the net receivable is fully collectible. Apple, Inc. (“Apple”), Facebook, Inc. (“Facebook”), and Google, LLC (“Google”) represent significant distribution, marketing, and payment platforms for our games. A substantial portion of our revenue was generated from players who accessed our games through these platforms and a significant concentration of our accounts receivable balance is comprised of balances owed to us by these platforms.

The following table summarizes the percentage of revenues and accounts receivable generated via our platform providers in excess of 10% of our total revenues and total accounts receivable:

	Revenue Concentration Year ended December 31,			Account Receivable Concentration as of December 31,	
	2021	2020	2019	2021	2020
Apple	51.8%	50.8%	48.1%	55.6%	54.1%
Facebook	25.9%	27.3%	31.2%	23.7%	25.9%
Google	19.1%	18.9%	17.2%	17.5%	18.0%

Fair value measurements

Fair value is defined as an exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants on the measurement date. The three-tiered fair value hierarchy that prioritizes the inputs based on the observability as of the measurement date is as follows:

- Level 1 – Observable inputs for identical assets or liabilities, such as quoted prices in active markets;
- Level 2 – Inputs other than quoted prices in active markets that are either directly or indirectly observable;
- Level 3 – Unobservable inputs in which little or no market data exists, therefore they are developed using estimates and assumptions developed by us, which reflect those that a market participant would use.

Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. Our assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the placement of assets and liabilities being measured within the fair value hierarchy. See Note 5: Fair value measurements.

Goodwill and indefinite-lived intangible assets

Goodwill consists of the excess of the purchase price over the fair value of identifiable assets acquired and liabilities assumed in a business combination. Our indefinite-lived intangible assets were acquired in a business combination and recorded at fair value.

We assess the carrying value of our goodwill and other indefinite-lived assets for potential impairment annually as of October 1, or more frequently if events or changes in circumstances indicate that the carrying value of the asset may not be recoverable.

When assessing goodwill for impairment, we may elect to first utilize a qualitative assessment to evaluate if a more detailed quantitative impairment test is necessary. An impairment charge is recorded based on the excess of the reporting unit’s carrying amount over its fair value. In determining fair value of our reporting unit in connection with our annual goodwill impairment test, we perform a blended analysis of the present value of future discounted cash flows and a market valuation approach. The discounted cash flows model indicates the fair value of the reporting unit based on the present value of the cash flows that we expect the reporting unit to generate in the future. The market valuation approach indicates the fair value of the business based on a comparison of the Company to comparable publicly traded firms in similar lines of business.

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In determining fair value of indefinite-lived intangible assets for purposes of our annual impairment test, we use the relief-from-royalty method. This method assumes that the trade name and trademarks have value to the extent that their owner is relieved of the obligation to pay royalties for the benefits received from them. The amount of impairment of indefinite-lived intangible assets is measured by the amount by which the carrying amount of the asset exceeds the estimated fair value of the asset.

We have identified a single reporting unit based on our management structure. There were no impairments of our indefinite-lived intangible assets or goodwill to date.

Finite-lived intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The carrying value of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses.

Finite-lived intangible assets are amortized over their useful economic life and assessed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of these assets is determined by comparing the forecasted undiscounted net cash flows from use and eventual disposition of the asset over its remaining economic life to its carrying value. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in estimates.

The amortization expense on intangible assets with finite lives is recognized in the statement of income and comprehensive income in depreciation and amortization.

Development costs

Development costs for new app development are capitalized and recognized as an intangible asset when the preliminary development stage has been completed, management commits to funding the project, it is probable that the project will be completed, and the software will be used for its intended function.

Following initial recognition of the development costs as an asset, the asset is carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete, and the asset is available for use. It is amortized over the period of expected future benefit. Amortization is recorded in depreciation and amortization.

Revenue recognition

Our social and mobile apps operate on a free-to-play model, whereby game players may collect virtual currency free of charge through the passage of time or through targeted marketing promotions. If a game player wishes to obtain virtual currency above and beyond the level of free virtual currency available to that player, the player may purchase additional virtual currency. Once a purchase is completed, the virtual currency is deposited into the player's account and is not separately identifiable from previously purchased virtual currency or virtual currency obtained by the game player for free.

Once obtained, virtual currency (either free or purchased) cannot be redeemed for cash nor exchanged for anything other than gameplay within our apps. When virtual currency is played on any of our games, the game player could "win" and be awarded additional virtual currency or could "lose" and lose the future use of that virtual currency. We have concluded that our virtual currency represents consumable goods, because the game player does not receive any additional benefit from the games and is not entitled to any additional rights once the virtual currency is substantially consumed.

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Control transfers when the virtual currency is consumed for gameplay. We recognize revenue from player purchases of virtual currency based on the consumption of this currency. We determined through a review of play behavior that game players generally do not purchase additional virtual currency until their existing virtual currency balances, regardless of source (e.g., bonus currency, gifted currency through social media channels, daily free chips, etc.), have been substantially consumed.

Based on an analysis of customers' historical play behavior, purchase behavior, and the amount of virtual currency outstanding, we are able to estimate the rate that virtual currency is consumed during gameplay. Accordingly, revenue is recognized using a user-based revenue model with the period between purchases representing the timing difference between virtual currency purchase and consumption. This timing difference is relatively short.

We continuously gather and analyze detailed customer play behavior and assess this data in relation to our judgments used for revenue recognition.

We generate a small portion of our revenue from subscription services. All monthly subscription fees are prepaid and non-refundable for a one-month period and auto-renew until the end customer terminates the service with the platform provider the subscription services originated. The subscription revenue is recognized on a daily basis beginning on the original date of purchase and has no impact on a customer purchased virtual currency.

Disaggregation of revenue

We believe disaggregation of our revenue based on platform and geographical location are appropriate categories that depict how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors.

The following table represents our disaggregation of revenue between mobile and web platforms (in thousands):

	Year ended December 31,		
	2021	2020	2019
Mobile	\$ 264,911	\$ 257,405	\$ 184,755
Web	98,294	100,937	88,855
Total revenue	<u>\$ 363,205</u>	<u>\$ 358,342</u>	<u>\$ 273,610</u>

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

	Year ended December 31,		
	2021	2020	2019
U.S. ⁽¹⁾	\$ 317,605	\$ 309,211	\$ 237,712
International	45,600	49,131	35,898
Total revenue	<u>\$ 363,205</u>	<u>\$ 358,342</u>	<u>\$ 273,610</u>

(1) Geographic location is presented as being derived from the U.S. when data is not available.

Principal-agent considerations

Our revenue contracts are with game players who are our customers. We have exclusive control over all content, pricing, and overall functionality of games accessed by players. Our games are played on various third-party platforms for which the platform providers collect proceeds from our customers and remit us an amount after deducting a fee for processing and other agency services. We record revenue at the gross amount charged to our customers and classify fees paid to platform providers (such as Apple, Facebook, and Google) within cost of revenue.

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Contract assets, contract liabilities and other disclosures

Customer payments are based on the payment terms established in our contracts. Payments for purchase of virtual currency are required at time of purchase, are non-refundable and relate to non-cancellable contracts that specify our performance obligations. All payments are initially recorded as revenue, as the player has no right of return after the purchase, consistent with our standard terms and conditions. Based on our analysis, at each period end, we estimate the number of days to consume virtual currency. This represents the revenue amount where the performance obligation has not been met and is deferred as a contract liability until we satisfy the obligation. The contract asset consists of platform fees for which revenue has not been recognized. For subscription revenue, the remaining portion of the daily ratable monthly subscription is recorded as a contract liability and the applicable platform fees as a contract asset.

The following table summarized our opening and closing balances in contract assets and contract liabilities (in thousands):

	Year ended December 31,	
	2021	2020
Contract assets ⁽¹⁾	\$ 674	\$ 718
Contract liabilities	2,246	2,393

(1) Contract assets are included within prepaid expenses and other assets in our consolidated balance sheet.

Cost of revenue

Amounts recorded as cost of revenue relate to direct expenses incurred in order to generate social gaming revenue. Such costs are recorded as incurred, and primarily consist of fees withheld by our platform providers from the player proceeds received by the platform providers on our behalf, hosting fees, and royalties.

Depreciation and amortization expense is excluded from cost of revenue and other operating expenses and is separately presented on the consolidated statement of income and comprehensive income.

Defined benefit pension plan

We operate a defined benefit pension plan under employment regulations in Korea. The plan services the employees located in Seoul and is a final wage-based pension plan, which provides a specified amount of pension benefit based on length of service. The service cost components of the net periodic benefit costs are charged to current operations based on the functional area of the employee. The total benefit obligation of \$3.4 million and \$2.8 million was included in other non-current liabilities as of December 31, 2021 and 2020, respectively, and the change in actuarial gains or losses was included in other comprehensive income.

The following table summarizes the components of the projected benefit obligation (in thousands):

	As of December 31, 2021	As of December 31, 2020
Projected benefit obligation at beginning of year	\$ 2,792	\$ 1,882
Service cost	759	738
Interest cost	29	30
Actuarial (gain)/loss	289	492
Benefits paid	(543)	(400)
Other	254	(273)
Foreign currency translation adjustment	(229)	323
Projected benefit obligation at end of year	\$ 3,351	\$ 2,792

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The plan assets are held in a limited number of marketable and liquid financial instruments and totaled \$3.4 million at December 31, 2021 and \$0 as of December 31, 2020. Valuation adjustments were not material.

Defined contribution plan

We sponsor a defined contribution plan for our employees based in Seattle, Washington. We provide a matching contribution of 100% on the first 1% of employee contributions and 50% on the next 5% of employee contributions. Our contribution expense for the years ended December 31, 2021, 2020 and 2019 was approximately \$289,000, \$467,000 and \$394,000 respectively.

Advertising costs

The cost of advertising is expensed as incurred and totaled \$74.2 million, \$61.8 million and \$28.5 million for the years ended December 31, 2021, 2020 and 2019, respectively. Advertising costs primarily consist of marketing and player acquisition and retention costs and are included in sales and marketing expenses.

Research and development

Research and development costs relate primarily to employee costs associated with in-app game development, feature design and enhancement, and engagement functionality that does not meet our internal-use software capitalization criteria. These costs are expensed as incurred.

Income taxes

Income tax expense is the total of the current year income tax due or refundable and the change in deferred tax assets and liabilities. Deferred tax assets and liabilities are the expected future tax amounts for the temporary differences between carrying amounts and tax bases of assets and liabilities, computed using enacted tax rates in the period in which they reverse. A valuation allowance, if needed, reduces deferred tax assets to the amount expected to be realized.

A tax position is recognized as a benefit only if it is “more likely than not” that the tax position would be sustained in a tax examination, with a tax examination being presumed to occur. The amount recognized is the largest amount of tax benefit that is greater than 50% likely of being realized on examination. For tax positions not meeting the “more likely than not” standard, no tax benefit is recorded.

Statutory withholding tax is recognized in income tax expense as incurred.

Segment information

Operating segments are identified as components of an enterprise about which separate discrete financial information is available for evaluation by the chief operating decision maker, our Chief Executive Officer, in making decisions regarding resource allocation and assessing performance. We view our operations and manage our business as one operating segment.

Recent accounting guidance – adopted

ASU 2017-11

The Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2017-11, “Earnings Per Share (Topic 260); Distinguishing Liabilities From Equity (Topic 480); Derivatives and Hedging (Topic 815): (Part I) Accounting for Certain Financial Instruments with Down Round Features, (Part II) Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception” in 2017 that simplifies the

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guidance for equity-linked financial instruments (free-standing or embedded) with down-round features that reduce the exercise price when the pricing of a future round of financing is lower. The standard was effective for us beginning January 1, 2020, with early adoption permitted. We early-adopted the standard using a full retrospective approach effective January 1, 2017.

In May 2017, we issued an aggregate principal amount of KRW210 billion (US \$177 million) of 2.5% Convertible Bonds due 2024 and aggregate principal amount of KRW90 billion (US\$76 million) of 2.5% Non-convertible Bonds due 2024 with detachable warrants to purchase 306,540 shares of our common stock at an initial conversion price of KRW293,600 (US\$270) per share. Both the 2.5% Convertible Bonds and the detachable warrants contain a provision commonly referred to as “down-round” protection, as well as certain standard anti-dilution provisions.

The warrants were not considered liabilities within the scope of ASC 480. In addition, they also met both the requirements of (1) being considered indexed to the Company’s own stock and (2) the qualifications for equity classification. Therefore, the warrants were recorded within stockholders’ equity. There are no provisions pursuant to which the Company could be obligated to pay cash or other assets to settle the warrants; settlement is in shares only, and all settlement provisions contemplate payment of an amount based on the difference between the fair value and a fixed exercise price for a fixed number of shares; subject to down-round and standard anti-dilution adjustments. Due to the adoption of ASU 2017-11, the presence of the down-round protection feature of the warrants does not preclude equity classification.

On May 15, 2020, DUG exercised its call option right and simultaneously redeemed the 2.5% Non-convertible bonds as consideration to exercise the warrants into 306,539 shares of common stock and at various dates in May and June 2020. STIC, as holder of the 2.5% Convertible Bonds, exercised its right to convert all outstanding bonds into 715,258 common shares.

The 2.5% Convertible Bonds (and the 2.5% Non-convertible Bonds) are not within the scope of ASC 480 and are not required to be accounted for at fair value. In addition, the Company elected to not carry the Bonds at fair value.

The Company evaluated the terms of the 2.5% Convertible Notes in accordance with ASC Topic No. 815 – 40, “Derivatives and Hedging - Contracts in Entity’s Own Stock” and determined that the underlying common stock is indexed to our common stock. We determined that the embedded conversion and other features did not meet the definition of a liability and therefore did not bifurcate the conversion and other features and account for it as a separate derivative liability. In addition, the 2.5% Convertible Bonds contain a contingent beneficial conversion feature that may be triggered if the conversion price is reduced upon a down-round in the future, subject to accounting under ASC 470-20-25-6. The contingent beneficial conversion cannot be cash-settled, is not beneficial upon issuance, and there was no premium upon issuance. Contingent beneficial conversion features are not accounted for until and unless they are triggered. Accordingly, no accounting for the conversion feature is necessary until that time. However, if the beneficial conversion feature is triggered, it would be measured using the number of shares to be received by the holder based on the adjusted conversion price multiplied by the stock price at the commitment date and recognized as accretion of the debt commencing at the date the down-round provision is triggered.

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Note 3: Goodwill and intangible assets

The majority of our intangible assets consist of assets acquired through the 2017 acquisition of DDI-US. There were no changes to the carrying value of goodwill during the years 2019-2021. The components of our other intangible assets were as follows (in thousands):

Asset Description	Useful life	December 31, 2021			December 31, 2020		
		Gross amount	Accum. Amort	Net Amount	Gross amount	Accum. Amort	Net Amount
Trademarks	indefinite	\$ 50,000	\$ —	\$50,000	\$ 50,000	\$ —	\$50,000
Customer relationships	4 years	75,000	(75,000)	—	75,000	(67,187)	7,813
Purchased technology	5 years	45,423	(41,811)	3,612	45,423	(33,149)	12,274
Development costs	3 years	9,486	(9,486)	—	9,486	(8,434)	1,052
Software	4 years	2,463	(2,396)	67	2,406	(2,181)	225
Total		\$182,372	\$(128,693)	\$53,679	\$182,315	\$(110,951)	\$ 71,364

On January 1, 2019, we determined, based on a strategic decision to sunset certain games within our game portfolio, to change the useful life of our development costs from 5 years to 3 years. This change in estimate resulted in incremental amortization expense of \$2.8 million in 2019.

Amortization expense for the years ended December 31, 2021, 2020 and 2019 totaled \$17.7 million, \$31.3 million, and \$33.1 million respectively.

Estimated amortization expense for the years ending December 31, 2022 through 2026 is as follows (in thousands):

Year	Expense
2022	\$3,679
2023	0
2024	0
2025	0
2026	0

Note 4: Debt

The components of debt at December 31, 2021, 2020 and 2019 are as follows (in thousands):

	As of December 31,	
	2021	2020
3.5% Senior Note due 2020	\$ —	\$ —
4.60% Senior Notes due to related party due 2024	42,176	45,956
2.5% Convertible bonds due 2024, early redemption 2022 including accrued interest	—	—
2.5% Non-Convertible bonds due 2024, early redemption 2022 including accrued interest, net of warrant discount	—	—
Total debt	42,176	45,956
Less: Short-term debt	—	—
Total Long-term debt	\$42,176	\$45,956

3.50% Senior Note due 2020

In May 2019, we refinanced our 4.3% Senior Note with a new credit facility (the 3.5% Senior Note) with two new lenders, with an original aggregate principal amount of KRW80 billion (US\$67 million), at a lower interest rate of 3.5%. The proceeds from the 3.5% Senior Note, along with KRW20 billion (USD17 million) in additional borrowing from our 4.6% Senior Notes with related party were used to repay amounts outstanding under the 4.3% Senior Note.

The 3.50% Senior Note required quarterly interest payments at 3.50% of unpaid principal which began in August 2019. Quarterly principal repayments of KRW20 billion (US\$17 million) are required.

The 3.5% Senior Note was paid in full in May 2020.

4.60% Senior Notes due to related party due 2024

The 4.60% Senior Notes due to related party, which collectively total KRW100 billion (US\$84 million) at inception, accrue 4.60% interest quarterly on the outstanding principal amount until maturity. Interest and principal are due in full at maturity (May 27, 2024).

Voluntary principal and interest payments were made in June and September 2020. Principal of KRW20 billion (US\$17 million) and interest of KRW1.2 billion (US\$1.1 million) was paid in June 2020 and principal of KRW30 billion (US\$25 million) and interest of KRW3.1 billion (US\$2.7 million) was paid in September 2020.

Bonds

2.5% Convertible Bonds

Interest on the 2.5% Convertible Bonds is payable in quarterly cash coupon payments of 0.625% of the outstanding principal. The 2.5% Convertible Bonds have a 5.0% yield-to-maturity, which is accrued on the outstanding amount, compounded quarterly, with a portion paid out quarterly through the coupon until the outstanding principal is paid in full at maturity. The 2.5% Convertible Bonds will mature on May 26, 2024, unless earlier redeemed at the option of the holder, beginning May 2022. The maturity of the 2.5% Convertible Bonds is accelerated upon various events of default, including standard credit-risk related events, as well as changes in control, events that have a significant adverse effect on DDI, and others. The default rate of interest is 9%.

The 2.5% Convertible Bonds are convertible into 715,258 common shares at an initial conversion price of KRW293,600, subject to certain standard adjustments for anti-dilution protection (“conversion price adjustment”). The 2.5% Convertible Bonds also contain a provision commonly referred to as “down-round” protection, whereby, in the event of issuance of new debt with the conversion price below the 2.5% Convertible Bonds’ conversion price, or in the event of the sale of new shares at the price below the conversion price, the conversion price will be adjusted based on the magnitude of the dilution to existing shareholders. We believe the likelihood of triggering a conversion price adjustment is remote due to the control exercised by DUG and STIC and the expected operating performance of the Company. Through the conversion dates, no event triggering a conversion price adjustment or the down-round protection had occurred.

At various dates in May and June 2020, STIC, as holder of the 2.5% Convertible Bonds, exercised its right to convert all outstanding bonds into 715,258 common shares. In connection with these transactions, we paid STIC the accrued coupon interest of \$0.9 million and the unpaid yield-to-maturity interest of \$4.5 million was forfeited.

The conversion of the 2.5% Convertible Bonds was in accordance with the original terms of the instruments and were not subject to an inducement offer to convert as the terms of the conversion were not modified. As a result, the carrying value of the 2.5% Convertible Bonds, plus the forfeited yield-to-maturity interest, net of related income tax effects, of KRW 229.7 billion (US\$187.1 million, at May 15, 2020) with KRW 7.2 billion

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(US\$5.8 million, at May 15, 2020) recorded to common shares and KRW 222.5 billion (US\$181.3 million, at May 15, 2020) was recorded to additional paid-in-capital with no gain or loss recognized.

2.5% Non-convertible bonds and detachable warrants

As discussed further above, in May 2017, we issued aggregate principal amount KRW90 billion (US\$76 million) 2.5% Non-convertible Bonds due 2024 with detachable warrants to purchase 306,539 common shares at an initial conversion price of KRW293,600 per share, subject to certain standard adjustments for anti-dilution protection (“exercise price adjustment”). The warrants also contain a provision commonly referred to as “down-round” protection, whereby, in the event of issuance of new debt or sale of new shares at a price below the exercise price, the exercise price will be adjusted based on the magnitude of the dilution to existing shareholders. We determined the likelihood of triggering an adjustment to the conversion price was remote due to the control exercised by DUG and STIC and the expected operating performance of the Company. Through the date DUG exercised its call option rights, no event triggering an exercise price adjustment, or the down-round protection occurred.

Interest on the 2.5% Non-convertible Bonds is payable in quarterly cash coupon payments of 0.625% of the outstanding principal. The 2.5% Non-convertible Bonds have a 5.0% yield-to-maturity, which is accrued on the outstanding amount, compounded quarterly, with a portion paid out quarterly through the coupon until the outstanding principal is paid in full at maturity. The 2.5% Non-convertible Bonds will mature on May 26, 2024, unless earlier redeemed at the option of the holder beginning May 2022. The 2.5% Non-convertible Bonds are accelerated upon various events of default, including standard credit-risk related events, as well as changes in control, events that have a significant adverse effect on DDI, and others. The default rate of interest is 9%.

The warrants may be exercised with cash, by surrendering the 2.5% Non-convertible Bonds, or by any combination thereof during the period commencing on May 25, 2018 and ending on April 26, 2024 at the option of the holder. The 2.5% Non-convertible Bonds are due with a 30-day notification by April 26, 2024 unless earlier redeemed under the early redemption clause, which is before May 26, 2022.

On May 15, 2020, DUG exercised its call option right and simultaneously redeemed the 2.5% Non-convertible bonds as consideration to exercise the warrants into 306,539 shares of common stock. In connection with this transaction, we paid DUG the 2.5% accrued but unpaid coupon interest of \$0.3 million and the unpaid yield-to-maturity interest of \$1.9 million was forfeited and the remaining unaccrued bond discount eliminated. As a result, the carrying value of the 2.5% Non-convertible Bonds with warrants, plus the forfeited yield-to-maturity interest, net of related income tax effects, of KRW 79.0 billion (US\$64.4 million, at May 15, 2020) with KRW 3.1 billion (US\$2.5 million, at May 15, 2020) recorded to common shares and KRW 75.9 billion (US\$61.9 million, at May 15, 2020) was recorded to additional paid-in-capital with no gain or loss recognized.

As of December 31, 2021, maturities of short and long-term debt for the years ending December 31 are as follows (in thousands):

	<u>Total</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>
4.60% Senior Notes to related parties due 2024	\$42,176	—	—	\$42,176
Total	\$42,176	—	—	\$42,176

Note 5: Fair value measurements

The carrying values of our accounts receivable, prepaid expenses and other current assets, accounts payable, accrued liabilities, and short-term borrowings approximate their fair values due to the short-term nature of these instruments.

Our cash equivalents (Level 1 estimate) consist of money market funds and Korean market government bonds totaling \$236.6 million and \$61.1 million, as of December 31, 2021 and 2020, respectively. We rely on credit market data to track interest rates for other entities with similar risk profiles.

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We record all debt at inception at fair value. We perform subsequent analysis on available data point to evaluate the fair value of our borrowing as of the balance sheet date. We rely on credit market data to track interest rates for other entities with similar risk profiles. As of December 31, 2021 and 2020, we believe the fair value of our senior notes (a Level 3 estimate) approximates carrying value due to the nature of the instruments and the lack of meaningful change to our credit profile.

Note 6: Income taxes

Income (loss) before income tax consisted of the following (in thousands):

	Year ended December 31,		
	2021	2020	2019
US	\$ 97,918	\$ 89,416	\$ 62,706
Korea	2,696	(14,199)	(12,839)
Total Income before income taxes	\$100,614	\$ 75,217	\$ 49,867

The following table presents the detail of income tax expense for the periods presented (in thousands):

	Year ended December 31,		
	2021	2020	2019
Current:			
US	\$14,481	\$15,244	\$ 8,469
Korea	2,049	1,928	2,367
Total Current Taxes:	\$16,530	\$17,172	\$10,836
Deferred:			
US	\$ 8,154	\$ 5,105	\$ 5,278
Korea	(2,178)	(683)	(2,572)
Total Deferred Taxes	\$ 5,976	\$ 4,422	\$ 2,706
Total Income Tax Expense	\$22,506	\$21,594	\$13,542

The following table presents a reconciliation of the statutory rate and our effective tax rate for the periods presented:

	Years Ended December 31,		
	2021	2020	2019
Statutory Tax Rate	20.0%	20.0%	20.0%
Foreign Jurisdiction Rate Differential	3.5%	3.8%	3.4%
Non-deductible interest	0.0%	1.5%	0.0%
Withholding Taxes	2.0%	2.3%	4.6%
Tax Credits	(4.2)%	(3.5)%	(7.3)%
Valuation Allowance	1.6%	5.0%	7.6%
Other	(0.6)%	(0.5)%	(1.1)%
Total Tax Rate	22.3%	28.6%	27.2%

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Deferred federal, state, and foreign income taxes reflect the net tax impact of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and such amounts for tax purposes. The following table presents the significant components of our deferred tax assets and liabilities as of the dates presented (in thousands):

	Year ended December 31,	
	2021	2020
Deferred Income Tax Assets:		
Net Operating Loss Carryforward	\$ 8,333	\$ 8,206
Tax Credit Carryforward	12,615	9,529
Accruals and Reserves	1,584	1,762
Intangibles	15,643	14,158
Lease Liability	1,860	2,565
Deferred Tax Assets	\$ 40,035	\$ 36,220
Less: Valuation Allowance	(18,112)	(17,936)
Net Deferred Tax Assets	21,923	18,284
Deferred Tax Liabilities		
Goodwill	\$ (45,074)	\$ (35,096)
Accrued Interest	—	—
Right -of-use-assets	(2,162)	(2,424)
Other	(379)	(359)
Deferred Tax Liabilities	\$ (47,615)	\$ (37,879)
Net deferred Tax Liabilities	\$ (25,692)	\$ (19,595)

Realization of deferred tax assets is dependent upon the generation of future taxable income, if any, the timing, and amount of which are uncertain. We have provided a valuation allowance against certain deferred tax assets of Korea as of December 31, 2021 and 2020, because, based on the weight of available evidence, it is more likely than not (a likelihood of more than 50%) that these deferred tax assets will not be realized. As of December 31, 2021, we determined tax attributes expected to be realized prior to their expiration and recognized a deferred tax asset of \$2.6 million.

As of December 31, 2021 and 2020, we have Korean tax loss carryforwards of approximately \$39.2 million and \$34.4 million, respectively, which are available to reduce future taxable income. These losses begin to expire in 2026.

Additionally, we have Korean tax credit carryforwards of \$13.1 million and \$8.8 million as of December 31, 2021 and 2020, respectively, which are available to reduce future foreign tax liabilities. The foreign tax credit carryforwards begin to expire in 2022.

We have not recorded a liability for income taxes or withholding taxes on undistributed earnings of subsidiaries as of December 31, 2021 as we intend to reinvest such earnings outside of Korea for the foreseeable future. Given the Company's current and anticipated losses in Korea, the method of realizing the cumulative temporary differences related to foreign earnings is difficult to estimate. Therefore, the Company concluded it is not practical to estimate the related deferred tax liability.

We are currently not under audit in any tax jurisdiction. We do not have any uncertain tax positions and have not established reserves for tax positions based on estimates of whether, and the extent to which, additional taxes will be due.

Note 7: Shareholders' equity*Common stock*

We have 200,000,000 total authorized shares at December 31, 2021 and 2020. The par value per share is KRW10,000. Holders of outstanding shares of common stock are entitled to one vote for each share on all matters submitted to a vote of the holders of common stock. Holders of common stock are entitled to receive dividends that are declared by our board of directors out of legally available funds. In the event of a liquidation, dissolution or winding-up, the holders of common stock are entitled to share ratably in the net assets remaining after payment of liabilities. There are no conversion rights, redemption rights or sinking fund provisions, and there are no dividends in arrears or default. All shares of common stock have equal distribution, liquidation and voting rights, and have no preferences or exchange rights.

Note 8: Net Income per share

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding for the period, without consideration for potentially dilutive securities. Diluted net income per share is computed by dividing net income by the weighted-average number of common shares and dilutive common share equivalents outstanding for the period determined using the treasury-stock and if-converted methods.

Dilutive common share equivalents are comprised of warrants and shares issuable under our convertible debt arrangement described in Note4:Debt.

The following table presents the calculation of basic and diluted net income per share (in thousands except share and per share amounts):

	Years Ended December 31,		
	2021	2020	2019
Numerator:			
Net income applicable to common shareholders — basic	\$ 78,108	\$ 53,623	\$ 36,325
Dilutive effect of assumed conversion of convertible debt	—	2,687	7,311
Net income applicable to common shareholders — diluted	\$ 78,108	\$ 56,310	\$ 43,636
Denominator:			
Weighted average shares outstanding — basic	2,303,200	1,807,410	1,192,725
Dilutive effect of assumed conversion of convertible debt	—	295,028	715,258
Dilutive effect of assumed conversion of warrants	—	46,676	87,148
Weighted average shares outstanding — diluted	2,303,200	2,149,114	1,995,131
Basic net income per share	\$ 33.91	\$ 29.67	\$ 30.46
Diluted net income per share	\$ 33.91	\$ 26.20	\$ 21.87

[Table of Contents](#)**Note 9: Accumulated other comprehensive income**

Changes in accumulated other comprehensive income (AOCI) by component for the years ended December 31, 2021, 2020 and 2019 were as follows (in thousands):

	Currency Translation Adjustments	Defined Benefit Pension Plan	Total
Balance at January 1, 2019	\$ 389	\$ (313)	\$ 76
Foreign currency translation gain/(loss)	9,742	—	9,742
Actuarial gain/(loss), net of tax	—	(385)	(385)
Balance at December 31, 2019	\$ 10,131	\$ (698)	\$ 9,433
Foreign currency translation gain/(loss)	13,676	—	13,676
Actuarial gain/(loss), net of tax	—	(294)	(294)
Balance as of December 31, 2020	\$ 23,807	\$ (992)	\$22,815
Foreign currency translation gain/(loss)	504	—	504
Actuarial gain/(loss), net of tax	—	(286)	(286)
Balance as of December 31, 2021	\$ 24,311	(1,278)	23,033

For years ended December 31, 2021, 2020 and 2019, we did not tax effect foreign currency translation gain/(loss) because we have determined such gain/(loss) is permanently reinvested and actuarial gain/(loss) is not tax effected due to a valuation allowance applied to our deferred tax assets.

Note 10: Leases

Our operating leases primarily consist of real estate leases for office space and do not have any non-lease components. We do not have any finance leases. Our total variable and short-term lease payments are immaterial for all periods presented.

The Seattle, Washington lease originated in July 2012 and consists of 49,375 square feet. In September 2018, the only option to extend, which was effective October 1, 2019, was exercised to extend the term for 61 months. The extended lease will expire in October 2024.

The Gangnam-gu, Seoul, Korea office space is subleased from our parent, DUG and consists of 31,636 square feet. The subleases originated in February 2019 and were amended in October 2020 to reflect an overall increase to DUG (sublessor). The subleases will expire in September 2023.

Supplemental balance sheet and cash flow information related to operating leases is as follows:

	December 31, 2021	December 31, 2020
Operating lease right-of-use asset	\$ 7,764	\$ 10,864
Accrued rent	934	877
Total operating lease right-of-use asset, net	\$ 6,830	\$ 9,987
Short-term operating lease liabilities	3,076	3,033
Long-term operating lease liabilities	4,688	7,831
Total operating lease liabilities	\$ 7,764	\$ 10,864
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 3.3 million	\$ 3.2 million

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Maturities of lease liabilities are as follows (in thousands):

<u>As of December 31, 2021</u>	<u>Seattle Lease</u>	<u>Seoul Lease (Related Party)</u>
2022	1,987	1,353
2023	2,037	1,167
2024	1,732	—
2025	—	—
Thereafter	—	—
Less: Imputed Interest	(379)	(133)
Total	<u>\$5,377</u>	<u>\$ 2,387</u>

Operating lease costs were \$3.3 million, \$3.2 million and \$3.1 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Note 11: Commitments and contingencies

Legal contingencies

On April 12, 2018, a class-action lawsuit was filed against DDI-US demanding a return of unfair benefit under the pretext that the Company's social casino games are not legal in the State of Washington, United States. Similar class-action lawsuits were concurrently filed with certain of our competitors, certain of which, announced settlements which the court has recently approved.

In August 2018, we filed a Motion to Compel Arbitration, which was denied and immediately appealed in December 2018. We were granted a Motion to Stay pending appeal in February 2019. In October 2019, a court date was issued and subsequently abated as the Ninth Circuit Appeals court hears the oral arguments and a resolution of appeal is determined in a similar case with one of our competitors. On January 29, 2020, the Ninth Circuit affirmed the District Court's denial of arbitration, thereby denying our appeal to compel arbitration. The case is now in District Court. On June 17, 2020, we filed a motion in the United States District Court for the Western District of Washington, which, if granted, would certify certain questions of state law to the Washington State Supreme Court for interpretation in accordance with applicable state law. On August 11, 2020, the District Court denied DDI-US's motion to certify certain questions to the Washington State Supreme Court. We subsequently filed a motion for reconsideration of this ruling. On August 13, 2020, DDI-US filed a motion to strike the plaintiffs' nationwide class allegations, which was noted for consideration on October 2, 2020. On September 10, 2020, DDI-US filed a motion to dismiss under Fed. R. Civ P. 12 (B)(1) and a motion to abstain asking the District Court to stay this lawsuit pending the resolution of a Declaratory Judgment action filed by DDI-US (and IGT) in the Washington State Superior Court seeking a ruling on certain relevant issues under Washington state law, which was noted for consideration on October 2, 2020. No date for a hearing on these motions has been set. Additional discovery has continued, including but not limited to, our issuance of discovery to plaintiffs. On January 15, 2021, our motion for reconsideration was denied. On February 25, 2021, plaintiffs filed a motion for class certification and for preliminary injunction. On March 19, 2021, our motion to strike the nationwide class allegations was denied. Discovery in the federal court case has commenced and is continuing. On April 25, 2021, plaintiffs filed their Second Amended Complaint, changing their allegations to include an additional corporate entity of co-defendant, IGT. DDI-US served plaintiffs with its expert disclosures and filed an Opposition to Plaintiffs' Motion for Class Certification and Preliminary Injunction on May 11, 2021. On June 29, 2021, the court denied the Company's motion for the certification of an interlocutory appeal from the court's order denying the Company's Motion to Strike Nationwide Class Action Allegations. On July 9, 2021, Double Down moved for relief from the upcoming settlement deadline and dispositive motions deadline. On July 19, 2021, the court extended the discovery completion and settlement conference deadlines to August 24, 2021 and September 7, 2021, respectively, and struck all subsequent case management deadlines, including the

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dispositive motion deadline and the trial date. The court stated in its July 19, 2021 order that it would reset case management deadlines after various motions, including plaintiffs' motion for class certification and preliminary injunction, and Double Down's renewed motion to stay pending arbitration, have been decided. On August 19, 2021, plaintiffs filed a motion for sanctions and request for evidentiary hearing, regarding alleged spoliation of electronic documents by Double Down. Double Down disputes the allegations and has responded. The parties have filed various other motions and engaged in discovery, including depositions and expert discovery.

IGT tendered its defense of the lawsuit to Double Down and sought indemnity for any damages from the lawsuit, based on various agreements associated with IGT's sale of Double Down. Double Down had previously tendered its defense to IGT and sought indemnity from it. The parties entered into a standstill or tolling agreement, which expired on September 1, 2021, and was extended by agreement until October 1, 2021.

The case is subject to significant uncertainties. In determining the likelihood of a loss and/or the measurement of any loss or range of loss, we evaluated (1) the facts and circumstances known to us, including information regarding the likelihood of a settlement and the outcome of discussions relating to indemnification by co-defendants, (2) the current state of the proceedings, including outstanding motions for certification of a class, or denial thereof, and other relevant events and developments, (3) the advice and analyses of counsel and other advisors, and (4) the assumptions and judgment of management, all of which involve a series of complex judgments about potential future events with multiple outcomes. In accordance with ASC 450-20, the Company has recorded a charge for this loss contingency during 2021, which is included in General and Administrative Expenses, reflecting the low end of the reasonably possible range of loss of \$3.5 million to \$201.5 million. The Company will continue to evaluate the appropriateness of the amount recorded as the litigation proceeds over time, potentially resulting in a material adjustment thereto.

We have incurred and expect to continue to incur significant expense defending the *Benson* lawsuit, and we may incur in the future significant expense with respect to any other lawsuits to which we may become a party. In general, subject to certain terms and conditions, insurance coverage for our litigation expenses and losses arising out of legal proceedings is assessed by our insurers on a case by case basis and there can be no guarantee that coverage will be available in any particular case. However, in connection with the *Benson* lawsuit, our insurer will not cover such expenses or any losses that could arise for any settlement amount or damages award.

The resolution of the *Benson* lawsuit, whether through the court or through settlement, could have a material adverse effect on our operating results and financial condition. The Company has recorded a charge to income for this litigation, which is included in general and administrative expenses. However, the Company may experience a loss in excess of the amount recorded, which could be material; the ultimate outcome cannot be known at this time due to the significant incomplete, uncertain, and unknown variables inherent with this stage of the pending litigation. The amount recorded represents management's estimate, in accordance with applicable accounting standards, of the low end of the reasonably possible range of loss of \$3.5 million to \$201.5 million. Management will continue to evaluate the reasonably possible range of loss and the amount recorded as the litigation proceeds over time, potentially resulting in a material adjustment thereto. As noted above, our operating results and financial condition could be materially adversely impacted by the resolution of the *Benson* case. We continue to dispute any allegation of wrongdoing and we intend to continue our vigorous defense in this matter. There can be no guarantee that, in such an event, we will be able to recover all or any part of any damages award or, if applicable, settlement amount, or obtain a contribution with respect thereto, from any other defendant. Additionally, there can be no guarantee as to what, if any, additional modifications any judgments or settlements might impose on one or more of our games.

In the future, additional legal proceedings or regulatory investigations targeting our social casino games and claiming violations of state or federal laws could also occur in other states, based on the unique and particular laws of each jurisdiction. We could, in connection with any such proceedings or regulatory actions, including as a result of the *Benson* case, be restricted from operating social casino games in certain states, or be required to make modifications to the operation of one or more of our games, or have to pay significant damage awards or

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settlement amounts. We cannot predict the likelihood, timing, or scope of the consequences of such an outcome, or the outcome of any other legal proceedings to which we may be a party, any of which could have a material adverse effect on our results of operations, cash flows, or financial condition.

NEXRF brought suit alleging patent infringement of certain patents for gaming applications used by defendants. The defendants were served with the lawsuit on January 8, 2021. The defendants filed a motion to dismiss plaintiffs' complaint on April 29, 2021, arguing that the asserted patents are not patent-eligible because they are drawn to an abstract idea. The defendants also filed a motion to stay discovery pending resolution of the motion to dismiss. During the pendency of the defendants' motions, however, a federal court in Nevada issued an order invalidating the asserted patents on the basis of patent ineligibility. NEXRF has appealed this ruling to the Federal Circuit. The parties agreed to stay the litigation pending the outcome of NEXRF's appeal of the Nevada decision. The case is now stayed, effective September 3, 2021. The case is subject to significant uncertainties and, therefore, determining the likelihood of a loss and/or the measurement of any loss or range of loss cannot be reasonably estimated.

Publishing and license agreements

DoubleU Games

We entered into the DoubleU Games License Agreement on March 7, 2018, and it was subsequently amended on July 1, 2019 and November 27, 2019. Pursuant to the DoubleU Games License Agreement, DoubleU Games grants us an exclusive license to develop and distribute certain DoubleU Games social casino game titles and sequels thereto in the social online game field of use. We are obligated to pay a royalty license fee to DoubleU Games in connection with these rights, with certain customary terms and conditions. The agreement remains in effect until either DUG no longer holds an interest, directly or indirectly, in DDI, or DDI no longer holds an interest, directly or indirectly, in DDI-US. In such event, the agreement provides that the parties will mutually renegotiate the terms of the agreement. As of December 31, 2021, we licensed approximately 44 game titles under the terms of this agreement.

International Gaming Technologies ("IGT")

In 2017, we entered into a Game Development, Distribution, and Services Agreement with IGT. Under the terms of the agreement, IGT will deliver game assets so that we can port (a process of converting the assets into functioning slot games by platform) the technology for inclusion in our gaming apps. The agreement includes game assets that are used to create new games. Under the agreement, we paid IGT an initial royalty rate of 10% of revenue for their proprietary assets and 15% of revenue for third-party game asset types. Effective January 1, 2019, we amended the agreement to revise the royalty rate for proprietary game asset types to 7.5% of revenue. The initial term of the agreement is ten (10) years with up to two additional five-year periods. Costs incurred in connection with this agreement for the years ended December 31, 2021 and 2020 totaled \$11.1 million and \$13.5 million, respectively, and are recognized as a component of cost of revenue.

Note 12: Related party transactions

Our related party transactions comprise of expenses for use of intellectual property, borrowings, and sublease previously described. We may also incur other expenses with related parties in the ordinary course of business, which are included in the consolidated financial statements.

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The following is a summary of expenses charged by our parent, DoubleU Games (in thousands):

	<u>Years ended December 31,</u>			<u>Statement of Income and Comprehensive Income Line Item</u>
	<u>2021</u>	<u>2020</u>	<u>2019</u>	
Royalty expense (see Note 11)	\$4,335	\$3,015	\$4,597	Cost of revenue
Interest expense (see Note 4)	2,010	3,106	3,778	Interest expense
Rent expense (see Note 10)	1,397	1,461	1,378	General and administrative expense
Other expense	206	155	131	General and administrative expense

Amounts due to our parent, DoubleU Games, are as follows (in thousands):

	<u>Years ended December 31,</u>		<u>Statement of Consolidated Balance Sheet Line Item</u>
	<u>2021</u>	<u>2020</u>	
4.6% Senior Notes with related party	\$42,176	\$45,956	Long-Term borrowing with related party
Royalties and other expenses	511	3,631	A/P and accrued expenses
Short-term lease liability	1,309	1,399	Short-term operating lease liabilities
Accrued interest on 4.6% Senior Notes with related party	6,454	4,918	Other non-current liabilities
Long-term lease liability	1,078	2,454	Long-term lease liabilities

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS NOT MATERIAL AND WOULD LIKELY CAUSE COMPETITIVE HARM TO THE REGISTRANT, IF PUBLICLY DISCLOSED.

MOBILE GAME DISTRIBUTION AND SERVICING AGREEMENT

Between

DoubleU Games Co., Ltd.

And

DoubleDown Interactive LLC.

Dated: November 1st, 2021

MOBILE GAME DISTRIBUTION AND SERVICING AGREEMENT

THIS MOBILE GAME DISTRIBUTION AND SERVICING AGREEMENT (this “Agreement”), is made and entered into on, November 1st, 2021 (the “Effective Date” is June 1st, 2021) by and between

DoubleU Games Co., Ltd., a corporation duly incorporated and validly existing under the laws of Korea and having its principal place of business at 16F, Gangnam Finance Center (Yeoksam dong), 152, Teheran-ro, Gangnam-gu, Seoul, Korea, (the “**Licensor**”);

DoubleDown Interactive LLC, a corporation duly organized and validly existing under the laws of State of Washington and having its principal place of business at 605 Fifth Avenue South, Suite 300, Seattle, Washington 98104 (the “**Partner**”).

The Licensor, and the Partner shall be referred to individually as a “Party” and collectively as the “Parties.”

RECITALS:

WHEREAS, the Licensor is the owner of or has a license to an online MOBILE game, titled “Undead World: Hero Survival” (the “**Game**”);

WHEREAS, the Licensor desires to attract end users to the Game by granting the Partner an exclusive license; (i) to distribute and market the Game in the Territory (as defined below in Article 1) and (ii) to provide certain Services (as defined below in Article 1) to end users located in the Territory; and

WHEREAS, the Partner desires to enter into an exclusive license agreement with the Licensor pursuant to which the Partner will distribute and market the Game in the Territory.

NOW, THEREFORE, in consideration of the mutual covenants and other terms and conditions contained herein, and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the Parties hereby agree as follows:

**Article 1.
Definitions**

For the purpose of this Agreement, the terms set forth in this Article 1, regardless of whether singular or plural form is used, shall have the following meanings:

- 1.1 “Confidential Information” shall mean all information (regardless of its form, manifestation or how it is known to the Receiving Party) concerning the Disclosing Party and, including without limitation, all of the data provided, in any form, regarding the technologies, business, financial affairs and operation of the Disclosing Party.
- 1.2 “Disclosing Party” shall mean the party which is disclosing its own Confidential Information to a Receiving Party.
- 1.3 “Illegal Use” shall have the meaning set forth in Article 4.2.
- 1.4 “Gross Sales Revenue” shall mean the gross sales revenue received by the Partner from any and all amount of fees actually paid by end users to Partner for purchasing access to the Game and for obtaining any in-game commodity (including, but not limited to, items, characters, skills) appearing in or used for playing the Game, and any other revenue received by the Partner by exploiting the Game, the method of calculation of which shall be separately determined by the Parties.
- 1.5 “Net Sales Revenue” shall mean the amount calculated by deducting any refunds, related taxes, hosting fees, and commission paid to service provider of application distribution platform (including, but not limited to, Apple App Store or Google Play Store) and/or social platform (including, but not limited to, Facebook) from Gross Sales Revenue.
- 1.6 “Receiving Party” shall mean the party which is receiving the Confidential Information from the Disclosing Party.
- 1.7 “Royalty” shall mean the royalty the Partner is obliged to pay to the Licensor under Article 5 of this Agreement.

- 1.8** “Royalty Tax” shall mean the taxes levied by the government on Royalty.
- 1.9** “Commercial Service” shall mean the game service provided after commencement of billing to end users in digital application distribution platform including, but not limited to, Apple App Store and Google Play Store.
- 1.10** “Services” shall mean services related to the server administration and management of the Game, technical support assistance to end users, billing to end users, marketing of the Game and any other activities as stipulated in, and contemplated under, this Agreement.
- 1.11** “Mobile Application” shall mean the mobile application downloaded through the digital application distribution platform for device installation to enable end users to access and play the Game.
- 1.12** “Trademarks” shall mean the “DOUBLEU” and “ Undead World: Hero Survival” trademarks and any other trademarks, trade names, identifying marks or characteristics or other equivalent used by the Licensor and/or the Game or associated manuals, promotional or sales brochures or other materials, whether registered or unregistered.
- 1.13** “Quarterly Report” shall have the meaning set forth in Article 5.1.3.
- 1.14** “Game Database” shall mean end user data relating to the game-play information, including, without limitation, user level, player card information, item inventory and such other data and information collected in connection with the Game.
- 1.15** “Territory” shall mean the geographical territory throughout the entire world.
- 1.16** “Hacking” shall mean any intentional attempts or acts of third parties to gain access to the Game illegally or without authorization of the Partner. Hacking may cause abnormal situations within the Game, including but not limited to, abnormal creation of certain items, abnormal enhanced player ability level and abnormal modification of various attributes of the Game.

Article 2.
Grant of License

- 2.1** The Licensor hereby grants a limited, exclusive license to the Partner, and the Partner hereby accepts right from the Licensor, under the terms and conditions set forth in this Agreement within the Territory:
- (a) to maintain and operate the Game and the Services; and
 - (b) to market and distribute the Game to end users.
- 2.2** The Partner acknowledges and agrees that it has no rights or claims of any type to the Game except such rights as created by this Agreement, and the Partner irrevocably waives and releases any claim to title and ownership rights (including and copyright ownership) in the Game.
- 2.3** Unless expressly approved in writing by the Licensor in advance, the Partner shall have no right to sublicense the rights granted under this Agreement to the 3rd party.

Article 3.
Promotional Materials

For the purpose of advertising the Game in the Territory, the Partner may request the Licensor, and Licensor shall provide, subject to their availability at the time of such request, the Partner with advertising and promotional materials that have been generally used by the Licensor.

Article 4.
Technical Assistance

- 4.1** The Licensor shall provide reasonable technical assistance to the Partner.
- 4.2** The Partner shall immediately report to the Licensor, with reasonable detail, any occurrences (or attempt thereof) of cracking, macro program editing, Hacking and other illegal or unauthenticated usage or modification of the Game or related server programs (“Illegal Use”) within 24 hours from such occurrence (or attempt thereof). The Licensor shall send a brief supporting schedule to the Partner upon receipt of the report from the Partner.

Article 5.
Royalty

5.1 Royalty.

In consideration of the license granted under this Agreement, the Partner shall pay to the Licensor an amount equal to [***] of the Net Sales Revenue on a quarterly basis (the "Royalty") pursuant to Article 5.

- 5.1.1 The Partner shall not pay the Royalty unless the quarterly Gross Sales Revenue exceeds [***] (the "Royalty Threshold") in such quarter, provided that Royalty Threshold may be changed by mutual agreement depending on the marketing strategy of the Game.
- 5.1.2 The Partner shall provide a quarterly Gross Sales Revenue report to the Licensor within 15 business days after the end of each quarter.
- 5.1.3 Each Royalty payment shall be accompanied by a fully detailed revenue and royalty report, checked and confirmed by the Partner (the "Quarterly Report").
- 5.1.4 The Quarterly Report shall be based on the application distribution platform's calculation.
- 5.1.5 The Royalty shall be computed every quarter as of the last date of each quarter and shall be due and payable by the last day of the next calendar month following the quarter in which the Royalty is computed (e.g., Q2 Royalty must be paid by the 31st day of July).
 - (a) Quarterly Report written by Partner shall be delivered to Licensor within thirty (30) business days after the last day of each quarter.
 - (b) Upon receiving the Quarterly report from the Partner, Licensor will provide invoice of applicable quarter within twenty (20) business days.
 - (c) Partner shall complete the payment by the end of the next month after invoice issuance.

(d) All amounts in the Quarterly Report shall be stated in US Dollars.

5.2 Telegraphic Transfer Remittance.

All payments to the Licensor made hereunder shall be made in US Dollars by means of official telegraphic transfer remittance to the following bank account:

[***]

5.3 Wire Transfer Fees.

All costs and expenditures arising from the payment (excluding the withholding taxes, if any), including without limitation the telegraphic fee from the Partner bank, shall be borne by the Partner.

5.4 Default of Payment.

In the event any payment is delayed by Partner under this Agreement as the result of the Partner, the Partner shall pay a default interest at a rate of [***] per annum for any outstanding amounts.

5.5 Taxes.

5.5.1 The Licensor agrees and acknowledges that the Partner is obliged to pay the Royalty Tax to the applicable taxing authority and the Partner shall withhold the relevant amount of the Royalty Tax for the quarterly royalties, thereby reducing the net amount of quarterly royalty. Upon the Partner's withholding of the Royalty Tax, the Partner shall be solely responsible for the payments of the Royalty Tax to the applicable taxing

authority, and the Partner shall pay such withheld Royalty Tax to the applicable taxing authority of the Licensor on behalf of the Licensor in a timely manner, and shall provide the Licensor with the proper evidence of such payment of the Royalty Tax.

- 5.5.2 All customs duties, taxes and any similar charges, which may be imposed on the Licensor by the Licensor's government with respect to this Agreement, shall be borne by the Licensor. All customs duties, taxes and similar charges that may be imposed on the Partner by the Partner's government as a result of entering into or in connection with this Agreement shall be borne by the Partner.

**Article 6.
Report & Auditing**

- 6.1 The Partner, upon the Licensor's request, shall use commercially reasonable efforts to provide the Licensor with all relevant information on the development of its business in relation to the Game during the term of this Agreement.
- 6.2 The Partner shall keep all of its record, contractual and accounting documents and company documents in relation to its business and activities under this Agreement during the term of this Agreement.

**Article 7
Marketing**

- 7.1 The Partner shall use commercially reasonable efforts to advertise, promote and perform marketing activities on the Game in the Territory.
- 7.2 The Licensor shall provide the Partner with relevant marketing and promotional materials for the Game which have been or will be produced and used by the Licensor during the term of this Agreement.
- 7.3 The copyright (including right of production of derivative works and compilation works) on all the marketing and advertising materials provided to the Partner by the Licensor in order for the promotion of the Game shall be owned by the Licensor. The Partner shall have the right to use such marketing and advertising materials while this Agreement shall remain in effect.

Article 8.
Partner's Obligations and Representations

- 8.1 Proper Protection for Intellectual Property and Stable Game Service. The Partner shall use reasonable efforts to keep its service systems free from any attempt at piracy, cheating or Hacking. The Partner shall make efforts to abide by the Licensor's recommendations to ensure adequate protection of the intellectual property rights of the Game.
- 8.2 Licenses. The Partner shall obtain and maintain all licenses, approvals, and permits necessary for the Partner to fully perform its obligations under this Agreement.
- 8.3 Third Party Infringement. The Partner shall notify the Licensor promptly if it becomes aware of any actual or alleged infringement of any of the Licensor's intellectual property rights. The Licensor may, in its sole discretion, take or not take whatever action it believes is appropriate in connection with any such infringement. If the Licensor elects to take any such action, the Partner agrees to reasonably cooperate in connection therewith.

Article 9.
The Licensor's Rights and Obligations

- 9.1 Technical Services.
- (a) The Licensor shall not be responsible for any damage or losses, economic or otherwise, caused by pirated client or server programs, cheating or macro programs.
 - (b) The Licensor shall assist the Partner to complete the installation of the game server and its pertaining software programs for the Game.
 - (c) The Licensor shall have the obligation to support the Partner for the Partner to be able to stably operate the Game in the Territory.

- 9.2 Ownership.
- (a) The Partner hereby acknowledges that all right, title and interest in and to the Game, including, without limitation, all intellectual property rights in and to the Game and on-line reporting system shall at all times belong to the Licensor. Except as expressly licensed to the Partner under this Agreement, the Licensor retains all the right, title and interest in and to the Game, and to any modification, correction, addition, extension, upgrade, improvement, adaptation or abridgment to the Game created by the Licensor.
- (b) The Partner hereby acknowledges and agrees that the Game Database shall be jointly owned by the Licensor and the Partner.
- 9.3 Reservation of Right. The Licensor hereby reserves all rights not expressly granted to the Partner in this Agreement. The Partner acknowledges that the Licensor claims and reserves all rights and benefits afforded under all applicable laws in the Game. Any copying, modification, or distribution of such copyrighted works not expressly authorized by this Agreement is strictly prohibited.
- 9.4 Exclusiveness. The rights granted to the Partner by the Licensor under this Agreement are exclusive in the Territory and terminable subject to the terms and conditions hereunder.

Article 10.

Term

- 10.1 Term. This Agreement shall become effective on the Effective Date, and shall continue in full force for twelve (12) months after the starting date of the Commercial Service (“Initial Term”), unless earlier terminated. Unless one Party gives the other Party written notice not to renew this Agreement at least thirty (30) days prior to the last day of the Initial Term and extended term, the Agreement shall be automatically extended one (1) year.
- 10.2 Phase-Out Period. If this Agreement is terminated, the Parties shall determine by mutual agreement whether there shall be a phase out period (the “Phase-Out Period”) and the length of such Phase-Out Period, provided that such period shall not exceed three (3) months. During the Phase-Out Period, the Partner shall (i) continue to make the Game available to end users and (ii) terminate its marketing and sales activities relating to the Game.

Article 11.
Termination

- 11.1 Termination. This Agreement shall be terminated automatically forthwith upon the sending of notice in writing upon the occurrence of one or more of the following events:
- (a) if the other Party commits a material breach of any of its obligations under this Agreement and such material breach is not be remedied within sixty (60) calendar days from the giving of written notice requiring said breach to be remedied;
 - (b) by either Party hereto, if the other party or its creditors or any other eligible party makes a filing for liquidation, bankruptcy, reorganization, compulsory composition, or dissolution;
 - (c) by either Party hereto, if the other Party is or becomes incapable for a period of ninety (90) days of performing any of its said obligations under this Agreement because of any *force majeure* described in Article 12.
- 11.2 Immediate Termination without notice. This Agreement shall be terminated automatically and immediately without any notice upon the occurrence of any of the following:
- (a) Any disclosure of the Game to a third party or modification thereof by the Partner in violation of this Agreement;
 - (b) A failure or delay of the Partner either to report the Royalty payment due or to pay the Royalty to the Licensor on at least three (3) separate occasions.
- 11.3 Consequences of Termination.
- (a) Upon expiration or termination of this Agreement, the Parties shall have no further rights or obligations under this Agreement, except that the rights and obligations of the Parties that have accrued shall not be affected thereby.

- (b) Upon the end of the Phase-Out Period after the termination of this Agreement for any reason, (i) all of the rights and licenses granted under this Agreement shall terminate and the Partner shall immediately cease any use of the Game, the Documentations, the Mobile Application, and the Trademarks, and (ii) the Partner shall terminate the Service. In addition, upon expiration or termination of this Agreement, the Partner agrees that it will use commercially reasonable efforts to assist that the Licensor or an entity designated by the Licensors succeeds the Service.

**Article 12.
Force Majeure**

Notwithstanding anything in this Agreement to the contrary, no default, delay or failure to perform on the part of either Party shall be considered a breach of this Agreement if such default, delay or failure to perform is shown to be due entirely to causes beyond the reasonable control of the Party charged with such default, delay or failure, including, without limitation, causes such as strikes, lockouts or other labor disputes, electrical power outages or shortages, riots, civil disturbances, actions or inactions of governmental authorities or suppliers, epidemics, war, embargoes, severe weather, fire, earthquake, acts of God or the public enemy.

**Article 13.
Warranties and Limitation of Liability**

- 13.1 The Licensor hereby represents and warrants that the Licensor has the right to grant the license set forth in Article 2 to the Partner. The Licensor further represents and warrants that the Game will operate in material compliance with any documentation or specifications provided by Licensor.
- 13.2 The Licensor does not warrant (i) that the operation of the Game will be error free in all circumstances, or (ii) that any defects in the Game will be corrected.
- 13.3 In no event shall either party be liable to the other party for consequential, indirect or special damages arising from any claim or action hereunder, based on contract, tort, and other legal theory. In no event shall either party be liable to the other party for damages for any cause whatsoever in an amount in excess of the amounts paid to Licensor as Royalty or the Quarterly payment within the previous twelve (12) months under this Agreement.

Article 14.
Use of Trademarks

- 14.1 The Licensor hereby grants to the Partner, upon the terms and conditions hereinafter specified, an exclusive, non-assignable license to use the Trademarks during the term of this Agreement in connection with servicing, use, promotion, distribution and marketing of the Game.
- 14.2 The Partner may use the Trademarks on the Partner's letter headings, invoices and all advertising and promotional material for the Service in such form and in such manner as shall have been approved by the Licensor.
- 14.3 The Partner shall not make any claim to the Trademarks or attempt to register any similar trademarks, trade names or service marks nor shall it permit, aid or abet others in doing so.

Article 15.
Intellectual property rights Infringement

- 15.1 In the event that Partner becomes aware of a claim that the Game, in whole or in part, infringes any third party intellectual property rights and/or a third party makes a claim against the Partner for alleged infringement of such intellectual property rights (in each case, a "Claim"), the Partner shall immediately by either e-mail or fax inform the Licensor thereof, and the Partner shall provide its cooperation and assistance to the Licensor in handling of the claim. Licensor shall defend, indemnify and hold Partner harmless from any such Claim.
- 15.2 The Licensor shall have no obligation to indemnify the Partner for any claim of infringement to the extent that any such claim arises out of (i) use by the Partner or any third party of the Game in an application or environment for which the Game was not designed or contemplated; or (ii) modification by the Partner or any third party of the Game which modification is not authorized by the Licensor. The Partner shall indemnify and hold harmless the Licensor from any damages occurred as a result of the Partner's infringement of any of the intellectual property rights of the Licensor.

Article 16.
Confidentiality

16.1 The Partner agrees that it shall not, without the prior written consent of the Licensor, disclose any Confidential Information to any third party, use or permit any Confidential Information to be used by any third party, except to the extent required by applicable law. The Partner shall implement reasonable procedures to prohibit the unauthorized disclosure or misuse of any of Licensor's Confidential Information.

16.2 The Licensor shall not, without the prior written consent of the Partner, disclose any of the Partner's Confidential Information to any third party that is transmitted by the Partner to the Licensor. The Licensor shall implement reasonable procedures to prohibit the unauthorized disclosure or misuse of any of Partner's Confidential Information.

Article 17.
Indemnification

The Partner shall compensate for the damages (excluding attorneys' fees) incurred by the Licensor due to the Partner's breach of this Agreement; provided, however, that the Partner's liability shall not exceed the amount paid to the Licensor for the previous twelve (12) months.

Article 18.
Miscellaneous Provisions

18.1 Entire Agreement. This Agreement constitutes the entire understanding and agreement between the Parties and supersedes and replaces any and all prior or contemporaneous, oral or written, representations, communications, understandings and agreements between the Parties with respect to the subject matter hereof.

18.2 Modifications. This Agreement shall not be modified, amended, cancelled or altered in any way, and may not be modified by custom, usage of trade or course of dealing, except by an instrument in writing signed by all of the Parties.

- 18.3 Waiver. The performance of any obligation required of a Party hereunder may be waived only by a written waiver signed by the other Party, and such waiver shall be effective only with respect to the specific obligation described.
- 18.4 Severability. If any provision hereof is found invalid, illegal or unenforceable pursuant to any executive, legislative, judicial or other decree or decision, the remainder of this Agreement shall remain valid, legal and enforceable according to its terms, and such invalid, illegal or unenforceable provision shall be replaced with a provision that approximates the substance and spirit of the invalid, illegal or unenforceable provision as closely as possible without being invalid, illegal or unenforceable.
- 18.5 Governing Law. This Agreement and all disputes arising out of or in connection with this Agreement shall be governed by, interpreted under, and construed and enforceable in accordance with, the law of Korea.
- 18.6 Jurisdiction. If any dispute shall arise in connection with this Agreement, any Party may initiate the dispute resolution procedures set forth in this Section by giving the other Party written notice of such dispute (“Dispute Notice”). Following issuance of a Dispute Notice, the Parties shall endeavor to resolve the dispute through negotiations conducted in good faith. All negotiations that take place in connection with the dispute shall be conducted in confidence and without prejudice to the rights of the Parties in any future proceedings. If the dispute cannot be resolved through good faith negotiations within thirty (30) days from the date upon which the Dispute Notice was issued, then any Party may request mediation in accordance with the Seoul Central District Court’s Mediation Procedure by sending a written notice to the other Party and to the Seoul Central District Court.
- 18.7 Assignment. Neither Party shall have the right, power or authority to assign this Agreement or any of its rights and obligations hereunder to any third party, and this Agreement may not be involuntarily assigned or assigned by operation of law, without the prior written consent of the other Party. Any such assignment without the other Party’s prior written consent shall be null and void.
- 18.8 Notices. Each Party shall be notify the other Party about any changes to their registered office address when their office address is changed during this Agreement. All notices, demands, requests, consents or other communications hereunder shall be in writing and shall be given by a pre-paid registered post mail or e-mail to the Parties.

CERTIFICATION PURSUANT TO EXCHANGE ACT RULE 13a-14(a) or 15d-14(a)

I, In Keuk Kim, certify that:

1. I have reviewed this annual report on Form 20-F of DoubleDown Interactive Co., Ltd.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent function):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

April 4, 2022

/s/ In Keuk Kim

In Keuk Kim
Chief Executive Officer

CERTIFICATION PURSUANT TO EXCHANGE ACT RULE 13a-14(a) or 15d-14(a)

I, Joseph A. Sigrist, certify that:

1. I have reviewed this annual report on Form 20-F of DoubleDown Interactive Co., Ltd.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent function):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

April 4, 2022

/s/ Joseph A. Sigrist

Joseph A. Sigrist

Chief Financial Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. Section 1350**

In connection with the filing of the Annual Report on Form 20-F for the year ended December 31, 2021 (the “Report”) by DoubleDown Interactive Co., Ltd. (the “Company”), the undersigned, as the Chief Executive Officer of the Company, hereby certifies pursuant to 18 U.S.C. Section 1350, to his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 4, 2022

/s/ In Keuk Kim

In Keuk Kim
Chief Executive Officer

**CERTIFICATION PURSUANT TO
18 U.S.C. Section 1350**

In connection with the filing of the Annual Report on Form 20-F for the year ended December 31, 2021 (the "Report") by DoubleDown Interactive Co., Ltd. (the "Company"), the undersigned, as Chief Financial Officer of the Company, hereby certifies pursuant to 18 U.S.C. Section 1350, to his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

April 4, 2022

/s/ Joseph A. Sigrist

Joseph A. Sigrist

Chief Financial Officer