



# Game Start-up Guide Book

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## I. Key considerations related with Game Start-up

Start-up literally means a newly established business. The term emerged from Silicon Valley and widely used for a newly established business typically technology and creative idea oriented. Following by the success of mobile game industry after development of smartphone, Netmarble Corp., Pearl Abyss Corp. and NatGames Co.,Ltd. have succeeded in IPO, and also the number of Game Start-ups has been increasing. The key considerations under the list of procedures such as set-up of Game Start-up, funding, exit are as follows.

1. Establishment
2. Funding
3. Development (details related with M&A and IPO)



# 1.

## Establishment

When establishing a Game Start-up, there are two ways to start: sole proprietorship under same process of ordinary start-up or corporation. The definition and establishment procedure for individual business start-up are as follows:

### Glossary · Terms

#### Sole proprietorship

The main agent of sole proprietor is an individual which means the business itself cannot be separated from the individual. Any loss or gain from the performance of business belongs to the individual and the achievement is considered as business income and following tax is levied under the name of the individual. Also, the individual shall be liable to all liabilities related with the business without limitation.

#### Corporation

The main agent of corporation is the corporation itself and the shareholders, equity holders, are having limited liability within the amount invested in capital. Also, any achievement from business performance belongs to corporate account and levies tax under the name of the corporation. Any gain from the corporation is provided to the shareholders as dividend which levies dividend income tax and to the CEO as salary which will occur earned income tax.



## Comparison between sole proprietorship and corporation

Item·Outline	Sole proprietorship	Corporation
Establishment procedure and organization cost	Business registration at tax office (Certificate issued by the relevant government authority may be required prior to registration, if necessary for certain industry) * No organization cost required	The procedures to follow are as below: - Capital investment - Determination of a CEO - Establishment foundation - Business registration * Organization cost may incur
Initial capital	No requirement	Minimum legal capital is abolished but commonly establish amount between KRW 1,000 thousand to 5,000 thousand
Going concern	When change in CEO, the original sole proprietor is reported of cessation of business and re-register of a new sole proprietor.	Corporation continues without any re-formation even change of CEO
Income allocation	All income allocated to the individual, the sole proprietor.	All income allocated to the corporation, not the shareholders and CEO.
Withdrawal of capital	Freely withdrawable from the individual's bank account	Random withdrawal from the corporate account is prohibited (any arbitrary withdrawal is considered as suspense payment and misappropriation) Shareholders and CEO personally earn income from dividend and salary respectively.
Tax issue	Under the income tax law, 6 to 42% tax rate is applied on the income earned considered as business income under the name of sole proprietor.	Corporate income tax of 10%, 20%, 22% or 25% on corporate income earned * Tax levied on the personally earned income is separately considered as personal income tax
Other issue	Simple accounting and tax treatment suitable for small business	Complex accounting and tax treatment suitable for business above certain size and targeted for sustainable growth

# Registration procedure for sole proprietorship and corporation

## Sole proprietorship

Registration procedure for sole proprietorship is as below:

- Confirmation of business type and code: inquire on hometax page of National Tax Service and its 'issue' section
- Preparation of a contract for lease/rental: should prepare a contract if the business purpose is for lease/rental
- Preparation of a registration application for sole proprietor
- Registration on hometax or at tax office
  - Register on hometax online by clicking the tab menu for a registration application for sole proprietor on the application/registration service and filling in the required application forms
  - Visit tax office with registration application, copy of resident registration, identification card, and stamp

## Corporation (Incorporated company)

### Consist of promoter

Promoter shall underwrite at least 1 share of the company when incorporated.

Qualification for a promoter is not limited for local resident, foreigner or corporation. Even minor under certain age can be a promoter if authorization by legal representative is made.

### Business Name

In principle, the name of a business shall be in Korean and include the term 'Corporation'. The name of a business which is the same with another one in a jurisdiction cannot be used in such jurisdiction. In order to find any similar business name that already exists, shall inquire at jurisdiction of the business location.

### **Filing articles of incorporation**

The promoter shall document articles of incorporation in order to establish a corporation. The article of incorporation should be certified by a public notary but, if capital is under KRW 1 billion, signature of a promoter can be effective. The articles of incorporation shall contain ① business purpose ② corporation name ③ the total number of authorized shares ④ price per share ⑤ the total number of shares to issue ⑥ location of a business ⑦ method of announcement ⑧ name, address, and identification number of promoter.

### **Determination on stock issued and subscription of shares**

The total number of stock issued when incorporated and price per share shall be determined on the articles of incorporation but, if not specified in the articles of incorporation, the number of stock issued and the par value shall be determined with consent of all promoters. Also a promoter shall underwrite at least one share of stock issued in writing when incorporated.

### **Recruitment of shareholders for stock subscription and distribution**

When incorporated, promoters should recruit shareholders to subscribe for the stock left after promoter underwritten. The recruited shareholder to subscribe a stock can be 1 individual and the number of stock the individual is subscribing can be a single share and more. The stock subscription shall be in writing under stock subscription agreement and the promoter shall determine whether to provide subscription right and notify the number of stock available.

### **Payment for the share**

When the total number of stock issued by a company is fully subscribed, the promoter should pay for the stock to the financial institution such as bank. The payment for the stock is maintained under the financial institution until certificate of incorporation is completed and the 'Certificate of Payment of Stock' is distributed to the promoter. If payment for share is completed, the corporation should document name, address, identification number, stock subscribed, and acquired year and month of the shareholders on the 'stockholder's list.' Any corporation under KRW 1 billion can be replaced with balance statement of bank.

### **Promoter's meeting**

The inaugural general meeting should be notified to all shareholders at least 2 weeks prior in writing according to business law. The promoter underwritten stocks of the company should determine the location of the corporation and elect directors as well as auditors. The elected directors and auditors should confirm the articles of incorporation and procedures to issue stocks and report to promoter.

### **Board of directors**

The corporation should hold a board of directors, elect a CEO, document minutes of BOD, get authorization from directors and auditors and be certified by a public notary.

### **Payment of registration tax**

The corporation should submit one copy of the registration application to city, district and borough under jurisdiction of the business location and pay for the registration tax.

### **Registration of business**

The corporation shall obtain a registration application and the necessary attached files to submit at office under jurisdiction.

### **Registration application**

Corporation registration application, legal seal, individual declaration, application to issue legal seal card, articles of incorporation, minutes of general meeting, report of directors and auditors, signed consent form of stock issue, certificate of subscription, list of shareholders, balance statement of bank, payment receipt of corporation registration tax, certificate of resident registration and certificate of legal seal.



## 2. Funding

### Funding of Venture Capital(VC) and Angel Funding

The company values of the Game Start-up is not different from other start-up companies; they constitute ability of game development and value of intangible asset rather than value of tangible asset such as machinery. Thus, it is difficult to estimate future income earned which makes hard to borrow money from financial institution. Therefore, ordinary funding method for a start-up company is venture capital for high risk taking and angel funding for individual investor oriented.

#### Current status of venture capital funding

In accordance with Disclosure Information of Venture Capital Analysis of Ministry of SMEs and Startups, venture capital's investment in the game industry amounted to 6.15 billion won in the first half of 2019, which represents a decrease by 16% compared to the investments of 73.4 billion<sup>1</sup> won for the same period of the previous year<sup>2</sup>. According to the most recent Game Start-up funding cases, they are mostly funded from VC around the amount of KRW 10 billion. Also, the common feature of the funded company in the case study is that the company has human capital which has extensive experience in game industry for many years and they are aiming for overseas rather than domestic expansion.

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1. This amount is a sum of the investment from the investment union owned by venture capitals. It excludes the amount invested through venture capitals' own accounts  
2. Source: Venture Capital Market Brief, June, 2019

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<b>Company R</b>	<ul style="list-style-type: none"> <li>• Investment date: July 2019</li> <li>• Investors: LB Investment, DT&amp;Investment</li> <li>• Investment type: Capital increase</li> <li>• Remarks: R Company, a subsidiary of T Company, is established to mainly engage in developing FPS games. Especially, the CEO of the Company is highly reputed for his outstanding ability to develop and business potential as he has several experiences in making success of domestic online FPS games.</li> </ul>
<b>Company A</b>	<ul style="list-style-type: none"> <li>• Investment date: July 2019</li> <li>• Investors: Korea Investment Partners, Mirae Asset Venture Investment Co., Ltd., KIWOOM Investment, Seoul Investment Partners</li> <li>• Investment type: Capital increase</li> <li>• Remarks: A Company, a Vietnam game publishing startup established in 2011, has provided various services including mobile advertising, fintech and E-sports. The recent number of service users registered reached 60 million and sales exceeded 35 billion won last year. A Company is the third largest company among local companies with a similar business structure. It is assessed that A Company has successfully settled down by quickly understanding characteristics of mobile game users in Vietnam and providing convenient payment services.</li> </ul>
<b>Company B</b>	<ul style="list-style-type: none"> <li>• Investment Date: August 2018</li> <li>• Investors: IMM Investment, Partners Investment, Smilegate Investment</li> <li>• Investment Type: Share purchase</li> <li>• Outstanding Detail: Company B has attracted a total investment amounts of KRW 38 billion from SK Securities, IMM Investment and others. It is a mobile game company mainly composed of developers from KAIST and POSTECH, and it is developing social casino games. Its game C and E's accumulative number of downloads have reached over 5 million, and game C, especially, is achieving a growth rate of 20% by month. With this investment, the company is planning to prepare for a step stone to achieve a full-scale growth by aggressively recruiting global human resources.</li> </ul>
<b>Company L</b>	<ul style="list-style-type: none"> <li>• Investment Date: July 2018</li> <li>• Investors: POSCO Capital, DTNI Investment, Seoul Investment Partners</li> <li>• Investment Type: Club deal<sup>3</sup></li> <li>• Outstanding Detail: Company L is an online game company and it is servicing a game in Korea from March 2017 through Company S. The game got weak responses from users after its release and was forecasted to possibly end the service. However, its market response has rebounded from March 2018 and entered successfully into the top 20 for the share ranks of internet cafes. The company's financial statement turned around, and the venture capitals participating in the club deal evaluate its value approximately to KRW 60 billion.</li> </ul>

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3. An investment led by 4~5 PEF/Private Equity Fund companies. It has a typical structure of PEF in a large scale.

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### Company H

- Investment Date: May 2018
- Investors: Storm Ventures, Tencent, BonAngels, Netmarble-Kona Fund, Devsisters
- Investment Type: Unknown
- Outstanding Detail: Company H is a game start-up with its head personnel who was the co-founder of Come2U Corp. It has attracted a total investment amount of approximately KRW 8 billion from venture capitals in the United States and China. Storm Ventures which led the investment invested to the company even before it was listed on KOSDAQ. Company is developing 3~4 titles concentrated on game element, and is planning to release them in overseas market before doing so in Korea.

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## Crowd funding

The majority of Game Start-up is small size and starts with new idea which is hard to get funded. Thus, recently many Game Start-ups use crowd funding in order to collect investment from various individuals.

### Definition and types of crowd funding

Crowd funding literally means being provided funding from the crowd. Any individual, team, corporation and organization, which need finance, try to receive collection of fund from unspecified many through web page and mobile network. This often happens by social network system (SNS), so as called social funding. The crowd fund can be classified as loan type, investment type, sponsor type, and contribution type.

### Loan type

Loan type is usually between individuals, which is a type of P2P financing (direct finance service between individuals). Individuals who are affluent can increase its capital through repayment of principle method and individual or corporation who needs finance can easily be accessible to funding without complex procedure at banks.

### Investment type

Investment type can easily provide funding to those which just started, Venture Corporation and development project, similar to loan type. Investors can make income by gaining equity shares and etc. through investment.

## **Sponsor type**

Sponsor type does not expect financial feedback. Sponsor type usually supports creative activity, culture and art, and social contributable activity. Mostly funding is made for movie, act, music composition, exhibition, concert, sports event and various social contribution project; and rewarded for receiving tickets, commercial products, gifts and making one's name on the list of sponsors.

## **The method of crowd funding and others**

Crowd funding is mostly working at internet website as a mediator. Fund raiser describes the purpose of fund, targeted amount, duration, and any rewards for the investors and uploads a promotional video. Then, various individuals, who like to invest on the project, send money to specified bank account. If the fund is successful, the website receives certain amount of commission and transfers the money to the fund raiser. If the targeted amount is not fulfilled within time, investors receive back their investment.

Crowd funding has been utilized since 2000. The most representative sponsor type funding websites are Kickstarter and Indiegogo in the United States; Just Giving, a NGO (public contributing type) funding site in England; Zopa, a P2P financial service in England; and Prosper in the United States. Crowdfunding platforms such as WADIZ Platform, Tumblbug and CROWDY is prevalent in Korea.

Since amendment to crowdfunding bill was passed through the National Assembly on January 25, 2016, equity-based crowdfunding, a financing method to raise small amounts of capital from a crowd of investors, has become effective. In addition, on April 3, 2018, amendments to the Capital Markets Act was passed and the limit of crowdfunding investment for general investors was increased from 5 million won to 10 million won. In fact, general investors were able to invest up to 2 million won for the same company during one year and the annual investment limit was restricted to 5 million won in total. As a result of the amendments, however, the annual total limit is extended to 10 million won and general investors can invest up to 5 million won for the same company during one year.

### 3.

## Development (details related with M&A and IPO)

### Expansion through M&A

Recollecting investment funds through being acknowledged for superior development capacity and selling shares to major game company or publisher overseas is the fastest way to exit for game start-ups. Recently, major publishers including Nexon Korea and NCSoft are enhancing mobile business by acquisition of domestic mobile development companies.

Meanwhile, according to Fair Trade Commission, there is a need to promote M&A for supporting technology innovation and small and medium venture companies. From this year, Fair Trade Commission has decided to quarterly announce on the current status of the major companies and their affiliates since doing so works as an obstacle to the major companies' M&A of start-ups.

#### Consideration regarding tax issue

##### Transfer income tax

According to Clause 3 in Article 94 of current Income Tax Law, transfer income tax is calculated by applying certain tax rate to capital gain accruing from transfer of stocks of a listed stock corporation by its major shareholders or stocks of an unlisted corporation. However, since transfer income tax levied on major shareholders is drastically revised according to Tax Law Revision announced by Ministry of Strategy and Finance as of December 5, 2017, there could be a transfer income tax issue when game start-ups want to recollect investment fund by selling shares. Current Transfer Income Tax Law is as follow:

Scope of Major Shareholder(Either meet the criteria of share ratio or market value)

Category	Securities market			Unlisted company	
	KOSPI	KOSDAQ	KONEX	General companies	Ventures
~18/03/31	More than 1% or More than KRW 2.5 billion	More than 2% or More than KRW 2 billion		More than 4% or More than KRW 2.5 billion	
18/04/01 ~ 20/03/31	More than 1% or More than KRW 1.5 billion	More than 2% or More than KRW 1.5 billion	More than 4% or More than KRW 1 billion	More than 4% or More than KRW 1.5 billion	More than 4% or More than KRW 4 billion
20/04/01 ~ 21/03/31	More than 1% or More than KRW 1 billion	More than 2% or More than KRW 1 billion		More than 4% or More than KRW 1 billion	
21/04/01~	More than 1% or More than KRW 0.3 billion	More than 2% or More than KRW 0.3 billion	More than 4% or More than KRW 0.3 billion	More than 4% or More than KRW 0.3 billion	

Transfer income tax rate on major shareholder

Classification		Capital gains tax rate
Small and medium-sized enterprises (SMEs)	Other than the major shareholders	10% <sup>4</sup>
	The major shareholders	20% <sup>5</sup>
Other than SMEs	Other than the major shareholders	20%
	The major shareholders	KRW 300 million or less of tax base, 25% for tax base over 300 million won (30% for the stocks held under one year)

4. Non-taxable for the stocks of a listed corporation that are transferred by a person other than the major shareholders

5. For the transfer from January 1, 2020, 20% for KRW 300 million or less of tax base / 25% for tax base over KRW 300 billion

## **Securities Transaction Tax**

Separately from transfer income tax, securities transaction tax is also levied on selling stocks. According to the article 7 on securities transaction tax law, tax base is current year transfer price of the shareholding. If the transfer price is unknown or unreasonably low, appraised price after the shareholding shall be the tax base according to the presidential decree. Also, clause 1 article 8 regulates the rate of transfer income tax as 1.5/1,000 in securities market, 3/1,000 in KOSDAQ, and 5/1,000 for over the counter market transaction and to be reported and paid within 2 months from the end of the second half of the year when the transfer of shareholding is actually made (The taxpayer's burden for filing is reduced by changing filing term from quarterly basis to semi-annual basis in 2018).

### **Consideration of M&A of Earn-out method**

In case of merger in Game Start-up, transfer of additional asset or shareholding to whom previously considered as shareholders, when certain conditions are satisfied, is often used as a conditional price. If obligatory employment condition of management and employee exist, the earn-out amount can be considered as obligation for labor rather than consideration for purchase of shareholding; thus high earned income tax rate can be levied by the side of seller. (Refer: Chapter 2(3) accounting issue at game industry)

## **Disclosure of a corporation through IPO**

Sustaining management following after stable growth, IPO on KOSDAQ and KONEX or a merger with a company already listed in the market will bring in fund for new start in stock market and realize certain amount of investment gain. Devsisters, Pearlabyss and SNK which was first incorporated from Start-up directly entered into KOSDAQ market and Sundaytoz and Natgames merged with SPAC in order to be listed in the market.

On April 4, 2018, Financial Services Commission revised Listing Regulation of the Korea Exchange as a follow-up measures of 'the Solution for Capital Market Restructuring through Promotion of the KOSDAQ Market' and diversified the requirements to enter into the market by establishing a separate requirement for exclusive listing. It has become possible to list a company just by meeting the criteria of earnings before tax, market value or equity capital. The revision made entering to the KOSDAQ market easier for start-ups, and listing among start-ups is being promoted successfully. Kakao Games Corp., SmilegateRPG, T3Entertainment are also planning for an IPO in 2020.

## KOSDAQ listing requirement

Classification	Comparisons of Listing Requirements for the KOSDAQ market (based on the version revised on 2019.4.17)			
	General company (including ventures)		Technology growth corporation*	
Criteria	Profitability and sales	Market valuation and business growth	Special case on technology assessment	Recommended on business growth
Dispersion of stock	Choose one from the followings.			
	1. More than 500 minority shareholders, more than 25% shareholding & more than 5% of public offering after invoicing (if minority shareholders are less than 25%, more than 10% of public offering) 2. More than KRW 50 billion of owner's capital, more than 500 minority shareholders & more than 10% of public offering after invoicing & more than certain number of shares by each size 3. more than 25% of public offering & 500 minority shareholders			
Management performance and market valuation	Choose one from the followings.			
	1. Income from continuing operation KRW 2 billion (for ventures, KRW 1 billion) & market capitalization KRW 9 billion 2. Income from continuing operation KRW 2 billion (for ventures, KRW 1 billion) & equity capital KRW 3 billion 3. Income from continuing operation & market capitalization KRW 20 billion & sales KRW 10 billion (for ventures, KRW 5 billion) 4. Income from continuing operation KRW 5 billion			
	1. Market capitalization KRW 50 billion & sales KRW 3 billion & more than 20% of sales growth rate in recent 2 business years 2. Market capitalization KRW 30 billion & sales KRW 10 billion (For ventures, KRW 5 billion) 3. Market capitalization KRW 50 billion & PBR 200% 4. Market capitalization KRW 100 billion 5. Equity capital KRW 25 billion			
Audit opinion	Audit opinion in recent business years should be "unqualified".			
Management transparency (Governance)	There should be an independent director, and full-time audit should be conducted.			
Other requirement	No restriction on transfer of share			
Qualitative factors	Comprehensive consideration of corporate growth, transparency and stability in sustainable management, other investor protection, sound development of KOSDAQ market, characteristics of industry, employment creation effect and national economic contribution			

\* Technology growth corporation: corporation with level A & BBB or better on technology evaluation from public agency (multiple)

Source: Korea Exchange Website

## KONEX listing requirement

### External requirement

KONEX market does not apply financial requirement such as sales amount and net income in order to promote active listing of Start-up SMEs and venture companies. Also, eliminate and mediate requirement not qualified for SMEs but apply the minimum requirement in order to not only encourage free trading of securities but also maintain reliability of financial information.

#### KONEX listing requirement (external requirement)

Classification	Detail	Note
Restriction on transfer of shares	Article of incorporation and etc. shall not stipulate restriction on transfer of shares. * This is not applied to the case where the restriction is imposed by other laws; however, it is deemed that such restriction does not impede the trading in the KONEX market.	
Audit opinion	Audit opinion in recent business years shall be “unqualified”	
Appointed consultant	Contract shall be made in a head with an appointed consultant.	Except for special listing
SMEs	Shall apply to SMEs under article 2 of fundamental law of SMEs	
Par value	One of choosing among KRW 100, 200, 500, 1,000, 2,500, or 5,000	Limited to par value

Source: Korea Exchange Website

### Special exemption on listing transfer to KOSDAQ

- Listing transfer to KOSDAQ by KONEX-listed corporations through fast track
  - Fast Track is allowed for unprofitable companies.
  - Fast track is allowed for companies with stable managerial structure by just screening their corporate transparency.
  - Reduction of equity capital requirement from KRW 3 billion to KRW 1 billion
  - Elimination of 3 year requirement of business operation
  - Exemption from going concern examination among the qualitative requirements
  - Shortening of examination period from 45 business days to 30 business days
- If public offering was arranged in KONEX, addition the result of last public offering to obligatory public offering rate.

### **Improvement on the requirement for a KONEX ➔ KOSDAQ listing transfer**

On April, 2018, Financial Services Commission added business growth requirement to the requirement for listing transfer to KOSDAQ. The requirement for listing transfer has been improved to support the KONEX companies with business growth.

Type	Common conditions	Conditions for each track
Track 1	1. 1 year after listing on KONEX 2. Recommended by nominated advisor (intermediary for listing)	<ul style="list-style-type: none"><li>- Operating profit in recent fiscal year</li><li>- More than 10 billion won of sales in recent fiscal year</li><li>- More than 30 billion won of aggregate market price</li></ul>
Track 2	3. Satisfaction of soundness of corporate management	<ul style="list-style-type: none"><li>- (Previous business year) More than 10% of ROE</li><li>- (Recent fiscal year) More than 10% of ROE, more than 2 billion won of profit from continuing operations</li></ul>
Track 3		<ul style="list-style-type: none"><li>- (Recent fiscal year) More than 20% of ROE, more than 2 billion won of profit from continuing operations</li></ul>
Track 4		<ul style="list-style-type: none"><li>- Sales increase by more than 20%</li><li>- More than 20 billion won of sales in recent fiscal year</li><li>- More than 1 billion won of operating profit</li></ul>
Track 5		<ul style="list-style-type: none"><li>- 10% of minority shareholders</li><li>- More than 200 billion won of KONEX aggregate market price, exceeding capital stock</li><li>- 300 billion won of aggregate market price</li></ul>
Rapid merger listing		<ul style="list-style-type: none"><li>- (Recent two business years) More than 1 billion won of profit for the year</li><li>- (Recent two business years) Operating profit exists</li></ul>

Source: Korea Exchange Website



## II. Current state and issues in game industry

1. Establishment
2. Funding
3. Development (details related with M&A and IPO)

# 1. Overview

## Classification and definition of industry

Main category	Subcategory	Further subcategory	Definition
Game industry	Production and distribution of games	Production and distribution of games	Businesses that design, produce, and distribute games
	Distribution/circulation of games	Management of PC or Internet cafes	Businesses that operate facilities for computer games via Internet or CD-ROM
		Management of electronic (or video) game cafes	Businesses that operate facilities with electronic game consoles that are not computers (including single location)

Source: Korea Standard of Industry Classification (KSIC) (2015)

Basically, the domestic game industry is subject to the other Acts (Assistance Act, Protection Act, Regulation Act) the Game Industry Promotion Act (“Game Act”) makes reference to. According to the definition provided in the Article 2, Clause 3 of the Game Act, game industry is an industry that is involved in production, distribution, provision of games or game merchandise (tangible and intangible goods and services and their complex that create economic added value using games), and other related services. Additionally, Clause 4, 5 and 6 stipulate that production, distribution, and supply of games fall under the game industry.

\* The game industry is categorized as production, distribution, and supply of games, and start-up game businesses would belong to the category of design, development and production area.

## Game industry as a part of E&M industry

According to Global Entertainment and Media (E&M) Outlook 2019-2023, a report annually published by PwC Global, game industry is categorized as a part of E&M industry. This report classifies the E&M industry into 13 categories such as VR, OTT, Internet advertising, Video games and e-sports, movies, music and etc. The video game and e-sports market is expected to have a CAGR of around 6% over the next five years. This is the fourth highest growth rate after VR, OTT and Internet advertising.



## Classification of game industry

### Classification by platform

There needs to be hardware to use a game software. Likewise, the game industry should be equipped with platforms (hardware) to make use of the contents (software). The game industry can be classified into mobile, on-line, and PC markets based on the types of platforms. In addition, an app player is causing a new sensation in mobile game market recently. Users who felt frustrated on the small screen of smartphone started playing mobile games on PC through the app player. Experts predict that the domestic app player market is still in its infancy but will grow rapidly in the future. The app player is a simulator that enables Android mobile games on operating systems such as Windows and Mac. Currently, the domestic game market has been reorganized into a mobile game. Mobile games quickly became a mainstream game, offering convenient accessibility and the ability to enjoy games moving around. However, the number of users who give up these advantages and enjoy mobile games on their PCs through app players is increasing recently.

Classification	Definition
Arcade game	Games that are installed and played at arcades using consoles for use at arcades only
Video game	Games that are played by inserting CD or DVD into a game console connected to TV.
PC game	Stand-Alone Games that users play against the program built in the computer using PC
On-line game	Games that many users can play simultaneously using communications network connected to the server.
Mobile game	Games that are played by getting on the Internet using cell phones or other hand-held device.

## Classification by content

Games have certain formats. Games can be classified based on the ways the games are conducted or the main contents. For instance, games where users play the game in a virtual world from the first person narrative called FPS, while games where players solve cases called adventure games. Games can be divided into board game, RPG, FPS, AOS, Sports, Adventure, Shooting, etc. In the online game market, League of Legend (AOS genre), Overwatch (FPS genre), and Battlegrounds (FPS genre) are gaining grounds, while MMOPRG games such as Lineage II Revolution, Lineage M, and Mu Origin, are also keeping steady popularity on both mobile and online platforms. Game users have increased. In the past, one production company used to focus on developing one type of genre and thus had its advantage/know-how in the industry. Recently, however, horizontal diversification through M&A and such is becoming more common for both production company and distribution company.

Genre	Definition and example
Board game	Play with board in a confined space such as go, chess, puzzle etc.
RPG (Role Playing Game)	Users control a character chosen from various kinds, develop it and undertake a task (Lineage, World of Warcraft) * includes MMORPG(Massively Multiplayer Online Role Playing Game)
FPS (First Person Shooting)	Users play in a virtual world and a real world from the first person narrative (Overwatch, Sudden Attack, Battle Ground) * also classified as Simulation (genre)
AOS (Aeon of Strife)	Combination of war and siege users' main purpose is to attack and knock other party's building down (League of Legend, DOTA2)
Sports	Users play an actual sports game (FIFA)
Shooting	Games in which a player avoids being shot and eliminates enemies (1942)
Adventure	Games which proceed as a main character solves cases (Biohazard, ICO)
RTS (Real-Time Strategy)	Games that provide virtual experience of activities hardly experienced in reality such as flight, city planning, group combat (StarCraft 2)
Visual Novel	Games mainly comprised of illustration and text (To Heart)

Source: Korea Creative Content Agency (2017) & Samil PwC Analysis

## Characteristics of game industry

### **Increased polarization**

The game industry appears to be perfectly competitive since market entry is easy with low initial investment costs. However, as large game companies are reinforcing market power with their first-mover advantage, polarization is increasing in reality. The effect of first-mover advantage is especially great in the on-line game market. The reasons are: first, usage pattern has been fixated due to tendency not to change consumption habit easily resulting from accumulated data and usage pattern; second, conversion cost has been increased due to a free-to-play revenue model.

### **Hit product-dependent industry**

The game industry is a typical hit product-dependent industry and performance of individual businesses largely depends on whether contents are a hit or not. Profitability is rapidly improved if one game succeeds as additional variable costs incurred after the development are small.

### **Uncertainty due to variability of demand**

It is difficult to forecast the game's chance of succeeding and its life cycle because it is difficult to understand the preference of users, the final consumer of a game. The game which has succeeded once shows great performance for several years but life cycle of each game shows big differences according to the type of game, and preference of a user. Also, ranking of games fluctuate drastically as new large scale games are released. Uncertainties in the game industry described above are fundamental business risk the game industry has.

### **Cycle-resistancy**

The game industry has little to do with business fluctuations. When comparing the trend of domestic game market growth and that of economic growth, they move in quite the opposite direction.

### **Export Industry**

When compared to other contents-related industry, the game industry is an industry whose products can be easily exported as the level of language and cultural barrier is pretty low and distribution process is not too complicated. Based on this, domestic game companies are entering the global market by expanding their businesses into Asian countries such as China and Japan, Americas, and Europe.

## Profit structure of the Game Industry

Game industry has a very low entry barrier and is a highly competitive industry as game businesses are a classic example of high-risk, high-return businesses with very low cost rates. According to KIS-LINE (2017), the game industry's average cost rate is only 24%, and has very high operating income ratio and EBITDA ratio, which are 31% and 35%, respectively. However, given that most of the company value is attributable to games, which are intangible assets, it is hard to evaluate the soundness of a business solely based on its financial performance.

The game industry shows a very simple cash flow structure where end-users first make a request to the billing system and then make payments. Thus, revenue mostly consists of cash-based revenue where there is hardly a trade receivable. In terms of cost, there is no special costs incurred other than server maintenance cost, rent, and labor cost once the business gets past the launching stage after the investment of initial development costs.

Considering that most of the recent investments in game start-ups have been in the form of PF (Project Financing), the game industry's cycle of capital returns after commercialization tends to be very short, when compared to that of general manufacturing industry or other projects. Game development proceeds in stages of "Planning-Developing-Demo-Alpha Testing-Beta Testing-Commercialization," and the game companies either get investments from publishers or investment firms or enter into license contracts. In case of board games and casual games, it takes from 3 months to one year to proceed from development stage to Beta Testing stage, and it takes from one year to three years on average for core games such as RPG and RTS. A company can usually measure its game's profitability at the Beta Testing stage, and it is usually determined within one or one and a half year after the Beta Test whether the game will be successful or not.



## 2. Market trend

### Online games

#### **Success of Fortnite despite the growth retardation of online game market**

The slowdown of growth of online market has become evident, and the sales growth of most game development companies has reached its limit. Most of the recently released online games did not do so well, and even the formerly popular games had to face decreasing user traffic due to the influence of League of Legend. In this situation, Fortnite, a battle royale multiplatform game developed by Epic Games, is expending its market shares with remarkable growth records. As of March 2019, the number of registered users exceeded 250 million and in August, half a year after, it increased by 100 million. Game industry insiders say that not only mid-sized developers but also major publishers such as Activision Blizzard cannot avoid worsening performance due to the popularity of users in Fortnite. Even recently, Netflix, the largest media-services provider in video entertainment industry, has also been wary of Fortnite at the CEO level. Fortnite's unique feature is its attempt to collaborate with other entertainment. For example, various contents were prepared for sensational movies like Avengers and a mini concert performed by a famous DJ was held within this game for ten minutes, recording 10 million views. In addition to

targeting young consumers, creating a new culture platform is one of Fortnite's success factors.

#### **Acceleration of the transition into the post-going online stage**

The online game environment, which is largely represented by stagnation in the growth of the online game market and crowding of users to <League of Legends> and <Overwatch> inevitably forced changes upon domestic game companies with business structures focusing on online games. As a result, online game companies are quickly making a transition to the post-going online stage.

For medium-sized companies, it is even more necessary that they make a transition to mobile games. Most of these companies struggled in terms of management as sales from the existing online games decreased. At the same time, it became a trend to develop large-scale online games, which brought a surge in the cost of developing new games. Mobile games provided an alternative solution to overcome this problem. As a result, companies that did not have great interest in the mobile game market compared to others, such as Mgame, Webzen, and Hanbitsoft, are coming up with new mobile games.

The current status of the main domestic online game companies' mobile games released or to be released

Company	Main games
NEXON	Traha, Spriti Wish etc.
NEXON GT	AxE
NCSOFT	Lineage M, Final Blade etc.
Pearl Abyss	Black Desert M
Netmarble	The King of Fighters All-star, Modoo Marble, Seven Knights, Lineage2:Revolution etc.
NEOWIZ GAMES	Muorigin, etc.
Gravity	Ragnarok M

Source: Samil PwC Analysis

### Growing interest in overseas market

Entering an overseas market inevitably became the major issue as the domestic environment of the online game market deteriorated. Many domestic online game companies put much effort in targeting an overseas market. According to the China Game Industry Report of 2017, which was co-authored by the Chinese Yin Yang Jidian Committee and so on, Chinese game market reached 30.9 billion USD in 2017, beating US to rank first. Thus, domestic market is paying attention greatly to making market penetration in China as China has become world's largest online game market.

As of October 2019, among the top 10 online game rankings in China, <Dungeon and Fighter>, <Dreamworld> and <League of Legends> are ranked in order. However, due to high marketing expense, severe competition, and sanctions from Chinese government, the game industry is highly interested in market penetration and

market success in China. In particular, it is braking market penetration in China as domestic game companies have not been granted permission on distribute rights (or permissions) due to the deployment of THAAD (high-altitude missile defense system), and thus there is much attention towards the further market penetration in China. Even though Issuance of a game publication number has been restarted in China since last April 2019, but not a single license has been issued for Korean games. As barrier to market entry in China's games industry exists, it is still uncertain for Korean gaming firms to enter the gaming market in China. Rather, Korea has become China's major export market for games. The domestic game industry, which has not made efforts to diversify export lines since the suspension of its exports to China, is in danger of giving the domestic market to the Chinese industry.

## Mobile games

In 2017, the sales of the mobile game market increased by 43.4% compared to the sales figures in 2016 and amounting to KRW 6.2 trillion<sup>6</sup>. Traditionally, the mobile market developed centered around the telecommunication companies. However, with the advent of smartphones, game developing companies could facilitate communication themselves. This resulted in improving their business growth in the mobile market with the lowered cost of entry and commission rate. As a result, numerous small and medium companies appeared, accelerating the competition in the market.

### Transition to Free-to-Play Model

Recently, there has been a reorganization of the mobile game market with a transition from charging a certain amount of money to download a mobile game to making profits from the sale of items.

### The rise of hyper-casual gaming in global market

Hyper-casual games are emerging as a new trend in the global mobile game market. As the name suggests, hyper-casual games are lightweight games with simple mechanics that offer instant gameplay. The position of hyper-casual gaming has been growing considerably within the game market since 2018. Hyper-casual games accounted for 60% of the top 20 mobile free game downloads in the

U.S. in September 2018, three times higher than the same month in 2017. Hyper-casual games are another attraction that can be embraced by consumers in emerging countries in that they can be used in low-end devices due to their small capacity and that they can be played smoothly in slow network environments. As a result, the global expansion of hyper-casual gaming is expected to continue for some time, and China is expected to grow as the largest market in this field across all countries.

### Trend of domestic mobile games

Despite the rise of hyper-casual gaming mentioned above, domestic companies are not sensitive to these changes. This is related to the fact that there is only 20% similarity between the domestic and global markets. This is because the trend of mobile games in Korea is focused on hardcore genres of MMORPG. There is a particular dominance of the MMORPG genre in the South Korea market. This trend, which has been continuing since 2018, has attracted Korean game industry to focus on MMORPG hardcore genre, and naturally, there is a high proportion of domestic gaming companies in domestic game market share. However, MMORPG cannot be regarded as the mainstream in the global market even within the hardcore genre, and it is unclear how long the trend in the domestic market will remain

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6. Source: 2018 White Paper on Korean Games, Korea Creative Content Agency, 2018

in this genre. Therefore, it seems that it is time for domestic companies to make efforts to expand their portfolios in terms of securing a future survival base and targeting the global market.

### **The continuing problem with high sales volume and low profits**

While the sales of mobile games increased as the size of mobile game market grew, from the developers' point of view, operating income decreased compared to sales. And there were companies running under a deficit. This phenomenon arose because the domestic mobile game market was structured in a way that profits were distributed via many steps, and this structure worked as an impediment to the growth of game companies.

### **Issue on improvement of voluntary restraint on stochastic items**

Stochastic items, which was once again in the spotlight by Lineage M, are items that game users purchase but cannot know what they are before opening them in mobile and PC games. Therefore, the Korea Internet Digital Entertainment Association (KITA) launch a voluntary restraint improved in 2017 by complementing the measures to draw improvements in disclosure of stochastic item details, to monitor voluntary restraint

and to reinforce follow-up management, and considering to give incentives and penalties based on compliance with voluntary restraint. As a result, according to '2018 Game Users survey', the latest report, published by the Korea Creative Agency, more than half of the people found to be satisfied with the method of self-regulation. However, there is still the gambling issue of stochastic items, and thus there is a growing need to strengthen regulations in the audit of the government in 2018 following 2017.

### **Popularity of 'cross marketing' on webtoon, entertainment, and drama with games**

Mobile games that are based on webtoon, entertainment, and drama's IP are gaining popularity, and examples include 'GausElectronics', 'Hardcore Leveling Warrior', 'Lookism', and 'Cityfisherman M'. Games are made based on popular webtoons, which are verified IPs, and 'cross marketing' through webtoons, which were originally used to advertise games for a while now, is producing a synergy effect. Accordingly, the game industry will continue its collaboration with webtoons. Webtoon-based games have an advantage of appealing to a wider range of age groups than other newly released games since they can approach game users with more familiarity.

## Popularity of VR (Virtual Reality) and AR (Augmented Reality) games

As Nintendo's Pokemon GO ranked first in North America's Apple Appstore sales in just 14 hours after release, VR and AR games are increasingly getting a lot of attention and investment from the inside and outside of the country. In accordance with such global trend, domestic companies are actively developing VR and AR games. In particular, large offline stores such as VR rooms, specialty cafes, and theme parks are being activated mainly. The Ministry of Science and ICT (MSICT) predicted that the domestic VR market will reach 5.7271 trillion won by 2020 and there will be continuing growth in this area.

## The Outlook and Development for Mobile e-Sports

As mobile e-sports market is growing worldwide, it is being recognized as a new industry. Some factors, namely the vast number of smartphone users who can be its potential users and its advantage over computer games for being relatively easier to access and play, contribute to its favorable evaluation. Although the industry's 'pay-to-win' business model and its relatively inferior broadcast system and number of viewers compared to computer game industry

are acknowledged to be its setbacks, advancements in graphics followed by smartphone hardware developments and the manufacturers' implant of 'spectator-mode' for broadcast purposes are improving the grounds for mobile e-sports industry. It is evaluated that the industry will grow especially in emerging markets where more e-sports tournaments are being held, for expensive gaming computers are not as readily available.

## Synergy with Character industry

Game IP is a compound word for game and intellectual property rights, and IP means rights to 'intellectual property' such as expressions or inventions. The game IP business refers to a business in which a game company directly manufactures derivative works such as business, goods (accessories, t-shirts), animations and webtoons that receive royalties through license using intellectual property rights, which are intangible assets.

The market related game IP has been formed from a long time ago in Japan and the United States. Novels, animations cafes, restaurants, and movies using famous popular game IP are becoming huge markets with its fandom and the goods and entertainment industry using game characters are becoming popular. In Korea, large game companies are promoting full-fledged IP business by

expanding ‘one source multi-use’ (OSMU) business such as pop-up store, offline store, event, novelization and making a webtoon, film and contents version with its famous game IP.

In addition, the characters in the game are getting popular in themselves, and there is a movement to utilize the game character in various ways such as strengthening the brand through the game character, forming the fandom culture, and promoting the game. As the global character industry is estimated to reach \$121.5 billion (KRW 136 trillion) in 2017, the game industry is expected to have many positive effects such as increased sales through game characters and prolonged game life.

## ‘Console game’ development competition

Domestic gaming companies have been aggressively developing console games to target the global game market. Given the saturation of the domestic market in mobile and PC games, it is considered to be a strategic move to target the console market relatively popular abroad. Console game, generally called as a video game, refers to a game in which a game console is connected to TV or monitor screen to operate and it is represented by ‘Xbox’ of Microsoft and ‘PlayStation’ of Sony. According to the game industry, not only are the “Game Big Three” players including Nexon Korea, NC Soft and

Netmarble, but also a number of game companies such as Krafton (formerly, Bluehole) and Pearl Abyss are actively entering into the console market.

## Gaming combined with cryptocurrencies

Game companies are actively entering the cryptocurrency market due to the increase in the volume of cryptocurrency in recent years. In the example at the top, Nexon Korea acquired Korbit, a South Korean cryptocurrency exchange, and Bitstamp, a foreign cryptocurrency exchange, in 2017. One of the reasons that game companies are interested in cryptocurrency and blockchain is because there is endless possibility to combine game items with cryptocurrency. As a result, interest in the blockchain gaming industry has increased significantly, which is providing a new marketing tool for game companies by offering cryptocurrencies to attract customers. If the items in the game were owned by a game company, cryptocurrency is classified as a personal asset, allowing users to exercise their property rights to items in the game and broaden boundaries to real-world assets. In other words, game users can get rewards for game play and obtain gains when they quit the game. Gaming combined with cryptocurrencies are emerging as a new business model to replace game items obtained by random logic. Recently, Kakao, Mgame and HanbitSoft have released their blockchain-based games.

## Trend of blockchain and game industry

In 2017, “CryptoKitties”, the ethereum-based blockchain game, demonstrated the potential for the game to become a killer content of blockchain dApp<sup>7</sup> by maximizing the enjoyment of user-to-user transactions through blockchain. However, the game was so simple that users were easily tired of, and the service was unstable because network traffic was not properly handled when the users were flocking. Although progress is still slow due to technical barriers and limitations, there are certainly a lot of possibilities for blockchain and game industry to create synergy. The followings are how blockchain can have a positive impact on the game industry.

### Securing game data transparency

Although the game industry voluntarily regulates game items obtained by random logic, the users' doubt on the game items obtained by random logic still remains. The probability of obtaining items is disclosed in accordance with voluntary restraints of the Korea Association of Game Industry, but there is no way for users to verify that the probability is correct. Blockchain can provide objective and verifiable environment for users by securing data transparency. This allows users to view the probability of obtaining items transparently and objectively.

### Vitalization of game asset transactions

The current game services are subordinated to the game company's environment. From the user's point of view, there is a limit that the value of an item in the game is limited to the game only. As items obtained or purchased within a game are disconnected from the real economy, it is common to trade through a third part broker such as Itemmania in order to trade game assets that a user acquired while playing a game. However, the transaction structure through these brokers has restrictions on the complete transfer of ownership of game assets between users due to fraud or illegal issues. If game assets are managed by using blockchain, users can keep the assets acquired in the game in their personal wallets, not in the game company's servers. This allows users to demonstrate ownership of an individual's assets without a broker and to freely trade with other users about the assets.

### Improvement to game distribution structures

PC games are mainly distributed through Steam and mobile games through Google's Play Store and Apple's App Store. These platform operators charge fees up to 30% of the game company's sales based on its monopoly power. As the issues on excessive usage fee for platform have put a burden on game companies, there is a growing need to enhance profitability by changing distribution

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7. dApps(Decentralized Application) means Distributed applications utilizing blockchain.

structures. Just as the advent of Internet banks has led to lower borrowing rates of the existing commercial banks, a new paradigm will be introduced with the emergence of blockchain game dApp platforms.

Various attempts are made at domestic and foreign companies. Among them, the major issues are about platform. Blockchain technology based on decentralization will be able to reorganize the market ecosystem centralized with gigantic platforms that have dominated the market. OPSkins, a global item trading operator, has built a business model on WAX platform that allows users to exchange cryptocurrency with assets in the game. HanbitSoft, a South Korean publisher and developer of online games, has launched a blockchain platform called Brylite with an objective of establishing a blockchain game dApp platform. In addition, as Ground X, the blockchain subsidiary of Kakao, launched the official Klaytn mainnet, Kakao promoted partnership with several gaming companies.

The reason why the platform discussion is more active than the blockchain game itself is that institutional system is not yet supported in Korea. According to the Game Industry Promotion Act, all games that are provided in South Korea can be serviced when they are be graded by the Game Rating and Administration Committee (GRAC) Committee under the independent rating classification guidance. GRAC says that it is difficult to prepare blockchain game rating criteria until the government's clear position is made.

There are still many challenges to make successful convergence of blockchain and game industry, but the development potential is endless. New innovations are expected that future blockchain technology will create with the gaming industry.

# 3.

## Accounting issues

### Capitalization of development costs

#### Key accounting issues

The timing of capitalization of development costs for internally developed games

#### Relevant accounting standards

Classification	K-IFRS	K-GAAP
Relevant accounting standards	K-IFRS 1038, Intangible assets paragraph 51~67	K-GAAP 11, Intangible assets paragraph 17~22
Phase in which development costs may be capitalized	Research phase : expensed in the period that they arise Development phase: capitalized	Research phase : expensed in the period that they arise Development phase : capitalized
Practical Criteria for at which phase to capitalize development costs	K-IFRS and K-GAAP do not provide specific criteria and examples of development phase in which development costs can be capitalized in the game industry. In that sense, criteria under US GAAP is applied in determining the phase in which capitalization is possible. Under US GAAP, IFRS and K-GAAP, the development costs can be capitalized when technical feasibility is established and when future benefit is probable. Criteria (establishment of technical feasibility) under US GAAP that can be applied to the game industry are as follows. The company should at least complete a or b stated below in order to prove the game's technical feasibility. a. If a process of creating the computer software product includes a detailed program design, followings must be completed. <ul style="list-style-type: none"><li>• An enterprise must complete the product design and detail program design for the computer software product and establish that it has available necessary skills, hardware, and software technology to produce the product.</li><li>• An enterprise must substantiate the completeness of the program design and its consistency with the product design by documenting and tracing the detailed program design to the product specifications.</li><li>• An enterprise must identify the high-risk development issues in the computer software program through review of the detailed program design; if any uncertainties related to the high-risk development issues are discovered, they must be resolved through coding and testing.</li></ul>	



Classification	K-IFRS	K-GAAP
	<p>b. If a process of creating the computer software product does not include a detailed program design discussed with the following two criteria must both be established.</p> <ul style="list-style-type: none"><li>• An enterprise must complete a product design and a working model of the computer software product.</li><li>• An enterprise must substantiate the completeness of the working model and its consistency with the product design by testing the model.</li></ul>	

### **Industry trend of the time at which development costs are capitalized**

In the case of MMORPG which requires a large scale of research and development costs, the time at which technical feasibility is established and future economic benefit becomes probable is generally regarded as the time after Open Beta Test after Closed Beta Test has been finished. However, the period from Open Beta Test to commercialization is generally not long and most of the costs are incurred before Open Beta Test in the case of listed companies. For these reasons, development costs to capitalize are not material in value and it is difficult to document the basis and thus not many companies capitalize development costs.

## **Revenue recognition of item sales**

### **Key accounting issues**

Revenue recognition methods depending on the kinds of item

- Permanent items: items that can be permanently used without limits on period and number of uses
- Time-based items: items that can be used for a certain period of time
- Usage-based items: items that can be used for a certain number of times

## Relevant accounting standards

Classification	K-IFRS	K-GAAP
Relevant accounting standards	K-IFRS 1115, Revenue from Contracts with Customers	K-GAAP 16, Revenue
Revenue recognition criteria	<p>The contract is analyzed and recognized in accordance with the following five steps.</p> <ol style="list-style-type: none"> <li>1. Identification of contract with customer</li> <li>2. Identification of performance obligations</li> <li>3. Calculation of transaction price</li> <li>4. Distribution of transaction price to fulfillment obligation</li> <li>5. Recognition of revenue when complying with fulfillment obligation</li> </ol>	<p><b>Realized or Realizable</b></p> <ul style="list-style-type: none"> <li>- When cash or claims to cash are received in exchange for goods, services or other assets</li> <li>- When assets received in such exchange are readily convertible to cash or claims to cash</li> </ul> <p><b>Earned</b></p> <ul style="list-style-type: none"> <li>- When an entity has substantially completed a revenue generation process (when performance of related duty has been completed)</li> </ul>

## Revenue recognition methods for item sales

### Permanent items: recognize over the average period of game users' playing the game

- In the case of permanent items, since the company must provide a game service permanently, and the company has an obligation to provide the service so that the game users can use the item purchased permanently, the revenue cannot be recognized at once at the point of sale.
- Although service life of a permanent item is infinite, game users do not actually use the item permanently due to reasons like upgrades, appearance of a new item and such. Therefore, period of game users' using the item is estimated and the revenue is recognized over this period in practice. In that sense, estimating the period of game users' using the item for revenue recognition is a complicated issue in regards of accounting treatment.

### Time-based items: recognize revenue over the stipulated time

Revenue from time-based items is generally recognized over the stipulated time since game users are granted the right to use an item sold during stipulated time, and the company bears an obligation during stipulated time in exchange.

### Usage-based items: recognize revenue in proportion to the number of items used

The company's performance of duty is complete regarding the used portion as company grants certain number to be used for an item in the case of usage-based items. Thus, it is common to recognize revenue according to the consumption of an item.

## Revenue recognition of initial payment fee

### Key accounting issues

When a domestic game developer sells a game overseas, the most generalized type of a transaction is that a game developer grants an exclusive right to sell to a licensee in that area and license the developed game. Currently, domestic copyright contracts with domestic publishers tend to take place in the similar form.

Game developer who has a license of a game receives consideration for the license by an overseas licensee in such transaction. General types of consideration can be categorized as the followings.

- **Initial payment fee:** A lump-sum amount is received for providing technical support for localizing in the area and providing an exclusive right to sell during the contract period.
- **Running Royalty:** Certain % of sales in the area is received as royalty

### Relevant accounting standards

Classification	K-IFRS/US-GAAP	K-GAAP
Relevant accounting standards	<ul style="list-style-type: none"><li>- K-IFRS 1115 Revenue from Contracts with Customers</li><li>- ASC 605 Revenue</li></ul>	K-GAAP 16, Revenue
Revenue recognition criteria	<p>The contract is analyzed and recognized in accordance with the following five steps.</p> <ol style="list-style-type: none"><li>1. Identification of contract with customer</li><li>2. Identification of performance obligations</li><li>3. Calculation of transaction price</li><li>4. Distribution of transaction price to fulfillment obligation</li><li>5. Recognition of revenue when complying with fulfillment obligation</li></ol> <p>Licenses are categorized as right to access and right to use and timing of revenue recognition differs accordingly.</p> <ol style="list-style-type: none"><li>1. Access right: The access right is the intellectual property of a company that exists over the term of the license → Treated as a performance obligation to fulfill over time for accounting</li><li>2. Usage right: The right to use existing intellectual property at the time of granting the license -&gt; Treated as a performance obligation to fulfill over time for accounting</li></ol>	<p><b>Realized or realizable</b></p> <ul style="list-style-type: none"><li>- When cash or claims to cash are received in exchange for goods, services or other assets</li><li>- When assets received in such exchange are readily convertible to cash or claims to cash</li></ul> <p><b>Earned</b></p> <ul style="list-style-type: none"><li>- When an entity has substantially completed a revenue generation process (when performance of related duty has been completed)</li></ul>

## Revenue recognition methods

### **Initial payment fee: Initial payment fee is recognized over the contract period.**

- The judgment of access rights and usage rights differs depending on whether or not the copyright holder provides the copyright of the game to the publisher under the contract and carries additional obligations (maintenance, update, bug correction, inspection activity).
- access rights must meet all the following conditions:
  - The contract requires, or the customer may reasonably expect the entity to perform an activity\* that has a significant effect on the intellectual property for which the customer has rights.
  - Customers are exposed directly to the positive or negative impact of business activities.
- \* The activities do not result in the transfer of goods or services to customers as they are done, ie they are not a separate obligation to perform.
- In practice, royalty amount is determined and collected through a monthly or quarterly settlement with a licensee according to the terms of a contract. Generally, developers often have access rights because they contractually provide continuing development and update of game services to users. When judged as an access right, it shall be accounted for as a performance obligation to fulfill over the period.

### **Running royalty: Royalty revenue is recognized when royalties accrue on an accrual basis**

Licensor's claim for running royalty arises when sales of a game in the area accrue, thus royalty revenue is generally recognized on an accrual basis. In practice, royalty amount is determined and collected through a monthly or quarterly settlement with a licensee according to the terms of a contract.

## Contents of a license contract (example)

Contract clause	Contents of a contract	Accounting consideration (Licensor)
Clause 1. Contents of a game, development schedule, contract period, consideration and distribution of profit	<ul style="list-style-type: none"><li>- Contents of a game, an object of the license contract</li><li>- Area in which the License is granted</li><li>- Development schedule and service schedule for commercial version in the area</li><li>- Consideration for publishing: Initial fee, Running Royalty (including Minimum guarantee)</li><li>- Method of payment (down payment/progress payment/balance)</li></ul>	<ul style="list-style-type: none"><li>- Consideration of revenue recognition method for Initial fee, Running royalty, Minimum guarantee</li><li>- Recognition of income received in advance for initial fee received before commercialization</li></ul>

Clause 2. Entitlement of intellectual property right	<ul style="list-style-type: none"> <li>- Game server, client programming code and source : usually entitled to Licensor</li> <li>- Source related to graphic such as character, background and such: usually entitled to developer</li> <li>- Trademark right : usually entitled to an applicant for a trademark right</li> <li>- Other intellectual property right: usually entitled to Licensee</li> </ul>	N/A
Clause 3. Bearing of service costs	<ul style="list-style-type: none"> <li>- Licensee usually pays the costs for service in the area</li> </ul>	N/A
Clause 6. Glossary	<ul style="list-style-type: none"> <li>- Definition of each terms in the contract</li> <li>- Criteria for sales which is a basis for computation of royalty</li> </ul>	Confirmation of whether royalty is based on gross sales amount or net sales amount (gross sales amount-related expenses) is necessary.
Clause 7. Method of payment	<ul style="list-style-type: none"> <li>- Initial fee payment schedule : down payment/progress payment/balance</li> <li>- Running royalty payment schedule</li> </ul>	Confirm the schedule for collection of receivables
Clause 10. Rights and responsibilities of licensor	<ul style="list-style-type: none"> <li>- Perform activities for game's service in the area</li> </ul>	Confirmation of whether the access right and usage right of license are granted.
Clause 11. Rights and responsibilities of licensee	<ul style="list-style-type: none"> <li>- Provide intellectual property right related to the game and support technical aspects</li> </ul>	Confirmation of whether the access right and usage right of license are granted.

## Bearing the risk of uncollectible accounts receivable due from game users

### Types of contract with PG (Payment Gateway) provider

In general, game users pay through PG provider and game company collects bills from PG provider under the payment gateway contract between the game company and the PG provider. There are two types of payment gateway contract between the game company and the PG provider depending on who bears the risk of uncollectible accounts receivable due from game users.

- PG provider bears the risk of bad debt
- Game company bears the risk of bad debt

## Issues of bad debt depending on types of contract

Types of contract	Terms of contract	Accounting consideration
Case in which PG provider bears the risk of uncollectible accounts receivable due from game users	<ul style="list-style-type: none"> <li>- Game company collects bill from PG provider, regardless of whether game users pay to PG company.</li> <li>- Game company bears high commission fee to PG provider as it passes the risk of bad debt.</li> </ul>	Game company only bears the risk of collecting receivables due from PG provider. → Risk of bad debt is relatively low. This is because there normally exists a monthly settlement with PG provider.
Case in which game company bears the risk of uncollectible accounts receivable due from game users	<ul style="list-style-type: none"> <li>- Game company cannot collect bills if game users do not pay to the PG provider.</li> <li>- Game company bears low commission fee to PG provider as PG provider only provides payment gateway service.</li> </ul>	Game company bears the credit risk arising from individual game users failing to make required payments. → Risk of bad debt is relatively high. Risk of bad debt is relatively low compared to other industry but there exists a risk of uncollectible receivables if game users pay with credit card or cell phone. Thus, risk of bad debt should be evaluated using proper evaluation methods such as roll-rate which is based on collection period.

## Industry trend of contract with PG provider

Latest trend in the game industry is to make a contract under which PG provider bears the risk of uncollectible accounts. If game company bears the risk of uncollectible accounts receivable due from game users, measurement of risk in accounting standard is expected to be very difficult.

## Special consideration on mobile games

### Current state of mobile games

Release of mobile games using Kakao and Line platform is surging in recent years and a number of game companies are increasing investments in mobile games.

In domestic industry, commission for markets like Google, Apple, etc. who provide payment gateway service and such is approximately 30%. Additionally, around 30% of profit is paid as commission to the platform companies like Kakao. The trend in the overseas game industry is that mobile game companies receive commission based on certain amount of payments made by customers, etc. through a contract with publisher, which is similar to the case of on-line games.

### **Characteristics of mobile games and related accounting consideration**

There are items that share the characteristics of a time-based item/usage-based item/ permanent item in mobile games like in the on-line games. Accounting of deferred revenue arising from sale of these items has emerged as a significant issue.

Deferred revenue can be divided into the deferred amount regarding the game money that has not been used and deferred amount regarding the time-based item/usage-based item. The company needs to consider the characteristics of an item, characteristics of a game and the substance of a contract when recording deferred revenue.

The period during which an item provides benefit tends to shorten more rapidly in mobile games compared to on-line games. This is because, by nature, there are many short-term users and an actual retention period, (i.e. life cycle of a game) tends to be shorter than that of on-line games due to several competitors.

Just like in cases of on-line game industry, whether recognition will be in terms of gross amount or net amount under the contract and its substance, and recording of deferred revenue are considered to be significant accounting issues in mobile game industry.

## **Others**

### **Accounting for contingent consideration payment**

Contingent consideration in times of business combination refers to an obligation of the acquiring entity to transfer additional assets or equity interests to the former owners of an acquiree in exchange of control over an acquiree if specified future events occur or conditions are met. Condition of continuing employment of executives and employees who are former stockholders of an acquiree is significant grounds for a decision whether to treat contingent consideration arrangement as contingent consideration of a business combination or to treat as a separate consideration for supply of labor after the business combination.

### **Issues on impairment**

Common way of providing game service to the users is that a publisher purchases copyright of a game from a game developer. Publisher records advance payment regarding the copyright purchased and reclassifies it to intangible asset when the game is commercialized. Meanwhile, if revenue from the copyright does not reach the expected level made in the beginning, the company may need to recognize impairment of asset related to the copyright.

# 4.

## Tax issues

### Tax issues related to the sale of copyrights

The most common way to provide a game to a user is through a copyright agreement made between a game developer and a game publisher, after which a game publisher provides a game to a user. Game developer, in this situation, receives Initial fee, Minimum guarantee, Running royalty and such from a game publisher. Relevant tax issues are as follows.

#### Timing of revenue recognition for Initial fee and Minimum guarantee

##### Financial accounting standards

Initial fee and Minimum guarantee are recognized over the contract period as they are considerations of using the copyright (license). (Financial Supervisory Service 2007-14, 2007. 12. 31, Financial Supervisory Service 2006-022, 2006. 12. 31).

##### Current corporate tax law

Imputed time for copyright (license) contract is not stipulated in detail in the law but according to the related authoritative interpretation, if initial fee is received for granting the copyright of the game, then initial fee is included in the gross income of the business year during which copyright contract has been made. If minimum guarantee takes on a nature of minimum guarantee of running royalty which is paid as certain percentage of sales after the game is commercialized, it is included in the gross income over the contract period. (Corporate Tax-725, 2009.02.20)

#### Summary of when to recognize the revenue of copyright sales according to corporate tax law

- **Initial Fee:** include in the gross income of the business year during which the copyright contract was concluded (no obligation to refund)
- **Minimum Guarantee:** include in the gross income of the business year to which the date of running royalty settlement belongs to
- **Running Royalty:** include in the gross income of the business year to which the settlement date belongs

## The timing of revenue recognition for revenue earned from sales of game money.

If the game money required to play certain game is sold to game users or is given to game prizewinner for free, to provide games developed by the company itself by developing its own platform that provides Internet and mobile game services and games developed by other companies, the profit / loss attributed period is the business year in which the user uses the game money (The written corporation -1902, March 24, 2016).

## The imputed time of granting the royalties for the license fee paid by the game distributor

Based on the same logic as the game company, the imputed time of deductible expenses is decided according to whether or not to return. In the related authentic interpretation, if the rights fee paid under the mobile game publishing contract is correspond to the right acquisition price without return obligation, and if it does not correspond to acquisition of intangible fixed assets due to the Corporate Income Tax Act, the amount of deduction is included in the business year in which the contract date on which the payment obligation is determined (written legal entity-4219, June 13, 2017).

## Issues on foreign tax credit

The tax amount paid or payable abroad is deducted from the corporate tax of the business year during which foreign source income was included in the tax base for corporate tax (Corporate Tax Act, Article 57).

The time at which foreign source income is included in the tax base for corporate tax and the time at which foreign tax amount actually become payable may be different\*

\* Foreign tax amount becomes payable when receiving minimum guarantee from abroad under the contract, while foreign source income may be included in the tax base for corporate tax over the contract period.

CF) Reference: treatments by cases when foreign tax amount becomes payable

Case	Treatment
Included in the tax base but without withholding tax	Unless the tax amount to be paid is fixed, evidence document can be submitted by attaching it within three months from the time when withholdings is actually made (Article 94 (4) of the Act)
Withholding tax generated but excluded from the tax base	Managed as a memorandum account and receive foreign tax credit at the point of being included in the actual tax base

## Issues on value added tax in game industry

When a domestic game company sells an application through foreign application store, the company needs to file for value-added tax return.

### Related ruling: VAT-388, 2010.06.10

If an application for smart phones developed by domestic business is registered in an on-line open market and is bought by domestic and foreign consumers, it is considered as a taxable object. However, downloads by consumers outside of Korea are under application of zero rate.

### Summary of VAT treatment on transaction of an application developed and provided by domestic business

- **Tax rate:** The developer collects and pays VAT for transaction of an application developed and provided by domestic business. (Destination Principle)
  - Basic tax rate (10%) is applied to downloads by consumers in Korea
  - Zero rate (0%) is applied to downloads by consumers outside of Korea as the service is provided outside of Korea
- **Applicable exchange rate:** When consideration for using an application is paid in foreign currency, it is translated with an exchange rate at the point of settlement with an open market operator, when consideration is determined. (Enforcement Decree of Value Added Tax Act, Article 51)
- **Supporting documentation for zero rating:** When filing zero-rated VAT, specification on acquired foreign currency and supporting documentations confirming that zero-rating is applicable should be submitted.

### VAT treatment on game money of a game company

#### Related regulations

- **VAT2008-19, November 11, 2008**

Sale of 'points' that are used as means to pay for downloading various game software is not subject to value-added tax. Production and sale of cards used to charge these 'points' cannot be regarded as operating a separate business but the card itself is a taxable document subjected to stamp tax.

- **VAT-823, August 6, 2014**

When a business which provides on-line and mobile game services sells game money to the users in order to provide both games developed internally and externally by developing its own platform, the time of supply is when the users make payments for

the game money and the business issues a tax invoice or receipt with the amount of payments made by the users (excluding the amount of value-added tax) as supply price. In the case where users use game money for the game developed externally, the tax invoice is issued from the other company at the time of settlement.

In addition, game money that are provided free via sweepstakes by the business are not taxable objects under Article 4 of [Value-Added Tax Act].

- **Authentic interpretation-276, May 28, 2017**

When a company that develops a mobile game platform and provides online game services sells game money that can be paid with the game service provided by its website and issues an invoice and a receipt for the consideration received under Article 32 and Article 36 of Value-Added Tax Act, the timing of tax invoice issued shall be regarded as the time of supply in accordance with Article 17 (1) of this Act.

## **Tax treatment on impairment of development costs**

### **Issues on impairment of development costs**

When a game company develops its own game, it incurs development costs and there may be cases where the company recognizes impairment on grounds such as abandonment of development.

If a development project is cancelled, construction in progress is instantly included in deductible expenses under the corporate tax law. However, in the case of development costs which were capitalized and began depreciation, they are included in deductible expenses according to depreciation method and instantly included in deductible expenses only when their nature as assets is completely lost due to an outdated technology.

### **Related regulations**

- **Corporate Tax 46012-196, 2003. 3. 21.**

If a product's sale and use are suspended after depreciation of which began as development was successful, the undepreciated development costs of a product are included in deductible expenses according to depreciation method as their nature as assets is not completely lost. However, if development costs' nature as assets has been completely lost due to an outdated technology and thus development costs are subject to Article 31 Clause 7 of Enforcement Decree of the Corporate Tax Act, the amount of the book value of the relevant assets minus 1,000 won may be included in deductible expenses for the business year in which the date of discard falls.

- **Corporate Tax -87, 2011.01.31**

If development costs had been recorded as depreciable asset but development was cancelled before the development was completed, the undepreciated development costs are included in deductible expenses in the business year during which development was cancelled.

### **Issues on impairment of prepaid expenses (Minimum Guarantee, “MG”)**

MG is prepaid to a game developer by a game publisher in the development phase and is settled later if Running royalty does not reach the MG level. Impairment loss of MG may be recognized during development phase or after game opens.

Treatment on impairment of MG under corporate tax law is an issue in this situation.

#### **Impairment of MG after paid service begins**

MG is recognized in the profit and loss for corporate tax purpose at the point of settlement. (Corporate Tax-360, 2011.05.23.) Accordingly, impairment loss of MG may be included in deductible expenses over the remaining contract period.

#### **Impairment of MG before paid service begins**

Just like the cases of general development costs, impairment loss of MG may be included in deductible expenses at the point where the development of a game is technically halted. Thus, verification on whether a development is actually halted is needed.

#### **Related regulations: Corporate Tax-360, 2011.05.23.**

The minimum guarantee that game developer receives from game publisher in advance as they enter into a copyright contract under which copyright is provided for a certain period of time is first offset against running royalty that will be paid to a developer based on the publisher's sales. However, even though running royalty does not reach the minimum guarantee level, if a developer does not return the amount falling short, the minimum guarantee that game developer received in advance is included in taxable income in the business year to which settlement date of running royalty belongs.

## Tax treatment on tax credit for R&D

If there exists a department which is wholly responsible for research and development in a game company, Article 10 of Restriction of Special Taxation Act [Tax credit for Research and Manpower Development Expenses] is applicable to R&D costs. In addition, more tax credit is applicable to R&D expenses for new growth engine than to general R&D expenses.

### Whether research facility of a game company is subject to tax credit for R&D expenses

#### Definition of 'research and development'

(Restriction of Special Taxation Act, Article 9 ⑤)

The term "research and development" means activities to achieve scientific or technical development and to develop new service and service delivery system.

### Whether the work of a research facility is counted as new growth engine

#### In the case of 'R&D expenses for new growth engine'

(Restriction of Special Taxation Act, Article 10 ①)

#### Tax credit rate

Classification	Tax deduction rate
Large-Medium company	20~30%* *20% + Max 10% ((new growth R&D Expenses/Sales revenues) x 3)
Medium-sized company listed on KOSDAQ	25~40%* *20% + Max 10% ((new growth R&D Expenses/Sales revenues) x 3)
Small to Medium businesses	Max 40%* *20% + Max 10% ((new growth R&D Expenses/Sales revenues) x 3)

### The details of 'R&D expenses for new growth engine that may be relevant to a game company (attached Table 7)

4. Contents	b. Culture contents	(1) Game contents technology	Game contents production technology: game engine, game authoring tool, game UI(User Interface), game operating environment, game contents technology including serious game model development for planning and production of game contents
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## **Tax reduction or exemption for small or medium start-up venture enterprises**

### **Entitlement of tax reduction in case game start-up is a venture business**

A start-up (venture) enterprise shall be allowed the reduction of, or an exemption from, a tax amount equivalent to 50% (100%<sup>8</sup> for a start-up enterprise which is established in an area outside the over-concentration control zone of the Seoul Metropolitan area) of income tax or corporate tax on incomes derived from the business concerned for a taxable year whereto belongs the date on which income has been derived for the first time (for small and medium start-up venture enterprise, a taxable year whereto belongs the date on which income has been derived for the first time since such certification as a venture enterprise) and for the subsequent taxable years that will end within four years after the beginning of the following taxable year. (Article 6, Tax Reduction and Exemption Control Act of Korea)

### **Requirements for Small and Medium Start-up Enterprises**

- A small or medium enterprise which is established in the over-concentration control zone of the Seoul Metropolitan area (excluding cases that are not actual form of start-up such as merger, splits, investment in kind and others)
- An entity which is engaged in business field in accordance with Article 6-3 of Restriction of Special Taxation Act

### **Requirements of small or medium start-up venture enterprises (Restriction of Special Taxation Act, Article 6 Clause 2; Enforcement Decree of the Restriction of Special Taxation Act, Article 5 Clause 4)**

- Small or medium start-up venture enterprises entitled to a corporate tax reduction refer to a venture business as defined under Article 2 (1) of the Act on Special Measures for the Promotion of Venture Businesses which is certified as a venture business within three years from its establishment and meets the following requirements.
  - Small and medium enterprises that meet the requirements stated in the Article 2 Clause 2 of Act on Special Measures for the Promotion of Venture Businesses (small and medium enterprises that meet the requirements stated in the Article 2 Clause 1-2 are excluded)
  - A small or medium enterprise whose research and development expenses referred to in the attached Table 6 of Enforcement Decree of the Restriction of Special

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8. Small and medium enterprises for young start-ups founded before December 31, 2016 will be subject to 50% reduction, small and medium enterprises for young start-ups founded from January 1, 2017 to May 28, 2018 will be subject to 75% reduction.

Taxation Act as expenses for R&D and human resources development are at least 5% of its turnover in the relevant business year.

- Prescribed ratio of research and development expenses (5% of its turnover) applies only where a small or medium enterprise keeps maintaining its research and development expenses within the ratio prescribed from the business year to which the date on which it is confirmed as a venture business belongs. (Enforcement Decree of the Restriction of Special Taxation Act, Article 5 Clause 5)
  - The research and development expenses ratio requirement (5% of its turnover) must be met according to the rules under Enforcement Decree of the Restriction of Special Taxation Act separately from Act on Special Measures for the Promotion of Venture Businesses although the business is confirmed as a venture business by Small and Medium Business Administration.
  - If Confirmation as a venture business is revoked on grounds such as failure to maintain the requirements of a venture business during tax reduction period, tax reduction does not apply starting from the business year to which date of revocation belongs.
- Venture businesses refer to Venture Capital Investment Company, R&D Investment Company, under the Act on Special Measures for the Promotion of Venture Businesses. Currently, institutions confirming venture businesses are the following: The Korea Technology Finance Corporation, The Small and Medium Business Corporation, The Korean Venture Capital Association, institutions confirming venture businesses. (Act on Special Measures for the Promotion of Venture Businesses, Article 25; Enforcement Decree of the Act on Special Measures for the Promotion of Venture Businesses, Article 18 Clause 3)



# Appendix

1. Essential Game Start-up accounting principles standards
2. Essential Game Start-up tax standards

# 1.

# Essential Game Start-up accounting principles standards

## Objective of financial statement

### Components of financial statements

Financial statement is comprised of balance sheet (BS), income statement (IS), cash flow statement (CF), statement of changes in equity (CE), and footnote. It is a main tool for financial reporting. From beginning of BS, the ending BS can be earned with the change cumulatively recorded on IS during the year. CE shows the equity change between beginning and ending of BS. And CF is presented in cash basis and provides useful information comparing with IS.

### Preparation and presentation of financial statement

#### Going concern

The financial statement is prepared under the premise of management's intent to continue the operation of business and, if any intent to discontinue the operation of business, any fact, presentation basis, and reason shall be described in footnote. Assumption on going concern is the basis of historical cost and depreciation cost.

#### Responsibility to prepare financial statement in fair presentation

The responsibility is with management of the company and fair presentation means according to K-GAAP and K-IFRS. These are all listed in footnote.

#### Separate classification and consolidated presentation of financial statement items

Determination on whether present in separate or consolidated depends on materiality which generally means whether it affects decision making.

#### Preparation of comparative financial statements

In case of quantitative information, current year as well as previous year are generally disclosed together in order to allow information users a comparison. The non-quantitative information is described in narrative under the footnote and generally not compared between years.

## **Consistency on presentation and classification of financial items**

Consistency shall be maintained in order to allow comparison between periods.

Exceptionally, (i) change required by Korea - generally accepted accounting principle (ii) significant change in operation due to business merger or discontinuation (iii) better effective way to disclose the company's financial information and, in this case, the content, amount and reason shall be included in the footnote.

## **Reporting of financial statement**

IS, CF, and CE is flow concept presenting period of time and BS is stock concept which tells a point of time. The footnote is described in terms of materiality. If cash and cash equivalents on BS shall require explanation, footnote number is listed under BS and the footnote describes the details of company's holding cash, restricted cash and etc.

## **Statement of financial position**

### **Objective of financial position: Usefulness of financial position**

- **Liquidity:** The asset and liability are listed from highly liquid which provides liquidity information for information users.
- **Financial elasticity:** The percentage of liability can tell elasticity of the company.
- **Information on the company's investment and financial activity:** Financial position can tell how the company develops: expansion of warehouse will increase tangible asset and purchase of stocks outside of company will increase invested asset

### **Limitation on financial position**

- Book value of asset and liability does not match with fair market price since book is recorded under historical cost method. In order to mediate this issue, the company may use various indicators.
- Subjective measurement can be interrupted.
  - Judgement on collectability of trade receivable can be different from industry characteristics.
  - Loss on valuation can be affected by subjective judgement on feasibility of inventory sales
  - In case of tangible asset, useful life can be affected by its determination on depreciation method.
- Non-quantitative information cannot be described; instead footnote is disclosed.

## Organization of financial position

### Asset

Asset is usually classified into current and non-current according to whether it is easily turned into cash and not restricted within one year from reporting period. Also, if it is highly feasible within operation period, despite it is not a year, or its purpose is to sell in near future, can be considered as current.

Asset	Current	Quick asset	Cash and cash equivalent, Short term investment asset, Trade receivable, Deferred income tax asset, Prepaid asset, Advance payment, Accrued income, Other accounts receivable
		Inventory	Merchandise, Finished Goods, Semi-finished goods (sellable), Work in process, Raw material, Supplies
	Non-current	Invested asset	Investment property, Long-term investment securities, Investment under equity method, long term loan
		Tangible asset	Land, Building, Structures, Machineries, Vehicles, Construction in progress
		Intangible asset	Software, R&D and etc.
		Other non-current asset	Deferred income tax asset, leasehold deposit, long-term trade receivable, long-term other accounts receivable

\* Leasehold deposit and rent expense are on debit side; leasehold deposit received and rent income are on credit side (in terms of asset, expense, liability and income)

### Liability

Liability is classified into current and non-current and it depends on whether it is payable within a year from the end of reporting period or within ordinary business operating cycle.

Liability	Current	Short-term borrowing, Trade payable, Current tax liability, Accrued expense, Deferred tax liability, Withholding, Unearned income, Advance received
	Non-current	Debenture, Long-term borrowing, Provision for severance and retirement benefit, Provision for long-term warranty, Deferred income tax

\* Redemption date for a non-current liability is within a year  
: (Debit) Long-term borrowing (Credit) Current portion of long term borrowing

\* In case when redemption may be demanded due to violation of borrowing agreement  
: treat as current liability regardless of its period

## Equity

Equity	Equity capital	Common stock, Preferred stock (Preferred stock is given priority for dividend but not for shareholding)
	Additional paid in capital	Paid in capital in excess of par value, Other capital surplus (gain on capital reduction, gain on disposition of treasury stock): what are (+) to the equity
	Capital adjustment	Treasury stock, Other capital adjustment (loss on capital reduction, discount on stock issuance, loss on disposition of treasury stock, Stock option, Swap stock): what are (-) to the equity
	Retained earning	Legal reserve, Discretionary reserve, Unappropriated retained earning
	Other comprehensive income	Gain/loss on valuation of available for sale, translation gain/loss from oversea business, Gain or loss on cash flow hedge

## Statement of profit or loss

### **Objective of statement of profit or loss: Usefulness of statement of profit or loss**

Accrual basis, instead of cash basis, creates accrued income and accrued expense and such accounts do not exist for cash basis. Accrual basis provides information for future cash flow, evaluates management performance accurately and gives basic information in order to compute taxable income.

### **Limitation on statement of profit or loss**

It only reflects quantitative information neglecting psychological benefits and interrupted by subjective judgement (bad debt expense) which affects profit and loss. Income is by current cost and expense is measured by historical cost which also can lead to overestimated income effect.

### Income measurement method

Sales amount	Net of sales allowance, return and discounts
Cost of sales	Available sales amount net of ending inventory
Gross profit	Sales amount – Cost of sales
Selling and administrative expense	Expense highly related with business main operation such as salary and entertainment expense
Operating profit	Gross profit – Selling and administrative expense
Non-operating profit (+)	Interest income is generally treated as non-operating unless business is under financial industry.
Non-operating expense (-)	Interest expense, contribution, other bad debt expense, miscellaneous loss and etc.
Net income	Operating profit + Non-operating income – Non-operating expense – corporate income expense

### Cash flow statement

Cash flow statement predicts future cash flow and shows the company's ability to pay dividend and to repay its liability. Also, figures out falsification by analyzing sales amount out of trade receivable.

### Statement of changes in equity

Statement of changes in equity shows changes in equity capital, additional paid in capital, retained earnings, capital adjustment and cumulative other comprehensive income. The retained earnings can be drawn from net income.

### Footnote

Footnote describes non-statistical information as well as accounting policy, method, and outstanding detail of the company. It also includes contingent liability, agreement, and appropriation of retained earnings which are not presented in financial statement.

## External audit

External audit is an audit performed by external auditors independent from the corporation. Audit is a systematic process collecting objective evidence in order to determine whether the company's financial statement is fairly stated its economic activities and events in accordance with the provisions of accounting standard and to deliver the result for the information users. According to the enforcement decree of the Act on external audit revised on October 23, the companies subject to external audit are as follows, and the revised the enforcement decree of the Act on external audit will be applied from the business year beginning on or after November 1, 2019.

1. Public limited company	
Existing	Revised
<ul style="list-style-type: none"><li>- the assets are over KRW 12 billion won</li><li>- Assets and liabilities of more than KRW 7 billion won or number of employees of over 300</li></ul>	If three requirements among four (assets less than KRW 12 billion won, sales less than KRW 10 billion won, liabilities less than KRW 7 billion won, number of employees less than 100) are met, then a company is not subject to external audit.
2. Limited liability company	
<ul style="list-style-type: none"><li>- As a general rule, "all companies" are subject to external audit, and if there are three or more of the total 5 requirements, adding "less than 50 employees" requirement to the four requirements of the corporation, exemption could be made.</li><li>- After effective date of Law (November 1, 2019), if a public limited company changes to limited liability company, the same standard as a corporation is applied for 5 years</li></ul>	
3. Large-scale companies: all assets or sales exceeding KRW 50 billion are subject to external audit	

## 2.

# Essential Game Start-up tax standards

### Corporate tax

Corporate tax is levied on the income arising from the business when the business is run in the form of a corporation such as a stock corporation. It can be regarded as an income tax for companies. Corporations pay corporate tax under corporate tax law just like individuals pay income tax under income tax law.

#### Corporate taxpayer

A corporation has an obligation to pay corporate tax on income during each business year. A corporation with its head or main office or place of effective management in Korea (Domestic corporation) is liable to corporate tax on its worldwide income. Tax liabilities of a corporation with its head or main office located in a foreign country (Foreign corporation) are limited to Korean-source income.

#### Due dates for filing a tax return

A corporate tax return must be filed within three months from the last day of the month during which a corporation's business year ends. If a corporation's business year ends in December, the tax return is due on March 31.

#### Tax rates

Income during each business year		
Tax base	Tax rates	Progressive deduction amount
KRW 200 million or less	10%	-
Between KRW 200 million and KRW 20 billion	20%	KRW 20,000,000
Between KRW 20 billion and KRW 300 billion	22%	KRW 420,000,000
Over KRW 300 billion	25%	KRW 9,420,000,000

## Penalty taxes

In the case of failure to comply with obligations by the tax law, penalty taxes are imposed in addition to the calculated tax amount with the purpose of securing a faithful fulfillment of obligations prescribed in the tax law.

### Penalty tax on failure to file returns: apply the greater between penalty tax on failure to file returns and penalty tax on failure to maintain adequate books and records if both apply

Willful non-filing	MAX	① calculated tax amount*tax base of willful non-filing/tax base*40% ② gross revenue*0.14%
General non-filing	MAX	① calculated tax amount*tax base of general non-filing/tax base*20% ② gross revenue*0.07%

### Penalty tax on failure to maintain adequate books and records: excluding corporate tax on transfer income

Failure to maintain proper books and records	MAX	① calculated tax amount*20% ② amount of gross receipts*0.07%
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### Penalty tax for understatement of income: apply the greater between penalty tax for understatement of income and penalty tax on failure to maintain adequate books and records if both apply

Willful understatement	MAX	① calculated penalty tax on failure *tax base of willful understatement of income/tax base*40%. ② gross revenue*0.14%
General understatement		calculated tax amount*understated income amount/tax base*10%

### Penalty tax on unjust exemption or reduction

Application for unjust tax exemption or reduction	amount of unjust exemption or reduction*40%
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### Penalty tax for insincere payment and refunding return

Unpaid or under-paid amount (excess tax refund)\*the number of unpaid days\*3/10000  
(the number of unpaid days : the day after the due date(refunded day) – voluntary payment date)

### Penalty tax on failure to withhold tax

[①+②] (amount of unpaid or under-paid tax\* limited to 10% of unpaid tax)  
① amount of unpaid or under-paid tax\*the number of unpaid days\*3/10000  
② amount of unpaid or under-paid tax\*3%

### Penalty tax for failure to receive verifying documents

Amount for which verifying documents were not received or incorrect amount on verifying documents\*2%

### **Penalty tax for non-submission of statement of disbursement**

Amount of the transactions in the reports not submitted or unclear\*1%<sup>9</sup> (if the corporation submits the statement within 3 month after the due date, the rate will be reduced to 0.5%<sup>10</sup>)

### **Penalty tax for non-issuance of tax invoice**

failure to submit the aggregate table of invoices by seller and the aggregate table of invoices by purchaser, failure to enter all or some items to be entered on the aggregate table submitted, or false entry supply price\*0.5)%

### **Penalty tax for non-submission of aggregated tax invoice**

failure to submit the aggregate table of tax invoices by purchaser, omission of all or some items to be entered in the aggregate table of tax invoices by purchaser, or false entry supply price\*0.5% (exempt corporation)

### **Penalty tax on failure to register for cash receipt system and failure to issue a cash receipt**

Unregistered	gross revenue for the unregistered business year *1%* unregistered period/number of days in the relevant business year
Failure to issue	amount by deal for which the issuance of a cash receipt was refused or amount by case for which the cash receipt was issued differently from the fact *5% (if the amount calculated by deal is short of five thousand won, it shall be five thousand won)

## **Procedures for filing corporate tax return**

### **Tax reconciliation**

Tax reconciliation is a procedure used to calculate an accurate taxable income by making adjustments of taxable income and deductible expenses based on the rules of tax law to the net profit or loss in the financial statements prepared under financial accounting standards which are generally regarded as fair and reasonable.

### **Difference between financial accounting and tax accounting**

The difference between financial accounting and tax accounting refers to the difference between net profit or loss for the current period calculated for the corporate's settlement of accounts and taxable income that is used to calculate corporate tax. Adjustments are made by adding and subtracting the following items.

- **Inclusion in gross income:** taxable items under tax accounting that are not recognized as revenues for financial reporting purposes
- **Exclusion from gross income:** revenues that are recognized for financial reporting purposes but are not taxable under tax accounting
- **Inclusion in expenses:** deductions that are allowed for taxable income under tax accounting but are not allowed as expenses under financial accounting

9. For the company that reaches submission deadlines before January 1st, 2018: 2%

10. For the company that reaches submission deadlines before January 1st, 2018: 1%

- **Exclusion from expenses:** expenses that are recognized for financial reporting purposes but are not deductible in calculating taxable income

## Classification of tax reconciliation

Tax reconciliation is divided into 'Closing adjustment' under which only expenses recorded in the book are included in deductible expenses and 'Return adjustment' under which expenses not recorded in the book must be included in the corporate tax return.

### Closing adjustment items (Examples)

- Depreciation costs (including instant depreciation) (Corporate Tax Act, Article 23)
  - \* Return adjustment is available for the assets governed by the Article 4 of Addenda of the Restriction of Special Taxation Act (Act No. 10068, Mar. 12, 2010) (available to the filed return as of '04.1.1.).
- Reserve funds for proper purpose business (Corporate Tax Act, Article 29)
  - \* Return adjustment is available for non-profit corporations that are subject to external audit.
- Retirement benefit appropriation funds (Corporate Tax Act, Article 33)
- Appropriation for bad debts (Corporate Tax Act, Article 34)
- Appropriation for redemption of claims for indemnity (Corporate Tax Act, Article 35)
- Bad debts referred to in the subparagraph 8 or 13 of paragraph 1 in Enforcement decree of the Corporate Tax Act, Article 19-2 (Enforcement Decree of the Corporate Tax Act, Article 19-2 paragraph 3 subparagraph 2)
- Loss on valuation of inventory assets which cannot be sold at the arm's length price due to damage, decomposition or on other grounds (Corporate Tax Act, Article 42 ③ 1)
- Loss on valuation of fixed assets damaged or destroyed due to grounds such as a natural disaster (Corporate Tax Act, Article 42 ③ 2)
- Loss on valuation of stocks stated below where the issuing corporation goes dishonored, receives authorization for its rehabilitation plan, or reveals signs of insolvency (Corporate Tax Act, Article 42 ③ 3)
  - a. Stocks issued by business founders or new technology business entities
  - b. Stocks issued by listed stock corporation
  - c. Stocks issued by a corporation, among the corporations, other than those referred to in subparagraph a or b, which is not in any relationship
- Loss on valuation of stocks of the issuing corporation which has gone bankrupt (Corporate Tax Act, Article 42 ③ 4)
- Loss from retirement of production facilities (Enforcement Decree of the Corporate Tax Act, Article 31 ⑦)

### Return adjustment items (Examples)

- An amount appropriated for covering carried forward losses among the value of assets gratuitously acquired, and the amount of reduced debt due to exemption from or expiration of debts (Corporate Tax Act, Article 18)
- Retirement insurance premium, charges for defined contribution retirement pension etc. (Enforcement Decree of the Corporate Tax Act, Article 44-2)
- Inclusion of value of fixed assets acquired with construction charges, insurance marginal profits, national subsidies (Corporate Tax Act, Article 36 ① and others)
- Non-inclusion of losses from evaluation of assets in deductible expenses (Corporate Tax Act, Article 22)
- Non-inclusion of excess of the ceiling including appropriation funds and reserve funds etc.
- Non-inclusion of depreciation costs in deductible expenses (Corporate Tax Act, Article 23)
- Non-inclusion of interest on loans appropriated for construction capital (included in case it is excessively recorded)(Corporate Tax Act, Article 28 ①)

## **Exterior tax adjustment system**

It is difficult for corporations subject to tax reduction or exemption and corporations subject to external audit to calculate accurate taxable income on their own because there arise several differences between financial accounting and tax accounting. 「Exterior tax adjustment」 is the system that requires these corporations to receive a tax settlement invoice from a tax accountant (including a public accountant and a lawyer) and file corporate tax return for accurate and faithful fulfillment of a tax obligation. Scope of corporations that are required to have a tax accountant prepare a tax settlement invoice is stipulated in Enforcement Rule of the Corporate Tax Law, Article 50-2 (Corporations entitled to taxation on the current net income under Article 72 of 「Restriction of special taxation act」 are excluded.)

- a corporation with revenue amount of KRW 7 billion or more in immediately preceding business year and a corporation required to receive an accounting audit by an external auditor based on Article 2 of 「Act on External Audit of Stock Companies」
- a corporation with revenue amount of KRW 300 million or more in immediately preceding business year who is entitled to special taxation under Article 29, 30, 45 of Corporate Tax Act or 「Restriction of Special Taxation Act」 (excluding special taxation under Article 104-5, 104-8 of the act)
- a corporation with revenue amount of KRW 300 million or more in immediately preceding business year whose reserve funds balance under Corporate Tax Act and 「Restriction of Special Taxation Act」 as of the end of the business year is KRW 300 million or more
- a corporation established within 2 years from the end date of the business year whose revenue amount in the current business year is KRW 300 million or more.
- a corporation whose corporate tax base and tax amount of immediately preceding business year were determined or corrected under Article 66 Clause 3 of Corporate Tax Act.
- a surviving corporation, a divided corporation, a corporation established through division, and a counterpart corporation to the division and merger that have merged or divided within 3 years from the end date of the business year when applied retroactively
- a corporation which has an overseas place of business or foreign subsidiary referred to in Article 57 Clause 5 of Corporate Tax Act
- a corporation trying to attach a tax settlement invoice prepared by a tax accountant for an accurate tax adjustment

## Corporate tax reduction and exemption

Tax incentive system such as tax reduction and exemption etc. stipulated under Corporate Tax Act and Restriction of Special Taxation Act can be divided into two types: system applicable only to small or medium enterprises, system applicable to both small or medium enterprises and general companies. The size of tax reduction varies depending on the business's kind, size and others. A lot of tax incentives are given to a business entity which falls under the category of small and medium business under tax law (From the tax year starting on or after January 1st, 2017, all sectors (Negative method) except for the consumer service industry<sup>11</sup> were changed from 49 industries (Positive method) including agriculture, manufacturing and construction industry), whose sales meet the criteria under the Framework Act on Small and Medium Enterprises, whose total assets do not exceed KRW 500 billion, and whose substantial independence meets the criteria under Article 3 Paragraph 1 Subparagraph 2 of Enforcement Decree of the Framework Act on Small and Medium Enterprises.

### Tax incentive system applicable only to small or medium enterprises

Tax incentives	Contents
<b>Tax reduction and exemption</b>	<ul style="list-style-type: none"><li>- Tax credits for investments by small or medium enterprises (3%)</li><li>- Tax reduction or exemption for small or medium start-up enterprises-venture businesses (50%)</li><li>- Special tax reduction or exemption for small or medium enterprises (5~30%)</li><li>- Tax reduction when moving out of Seoul metropolitan area (50~100%)</li><li>- Tax credits of social insurance premiums for increased number of employees</li><li>- Tax credits for small and medium enterprises re-employing career-interrupted women</li></ul>
<b>Inclusion in expenses</b>	<ul style="list-style-type: none"><li>- Contribution for supporting projects of information of small or medium enterprises is included in deductible expenses (small or medium enterprise as defined under Article 2 of the Framework Act on Small and Medium Enterprises)</li><li>- Gain from small or medium enterprises support facilities contributed is included in deductible expenses</li><li>- Special taxation for small or medium enterprises, etc. maintaining employment (small or medium enterprise as defined under Article 2 of the Framework Act on Small and Medium Enterprises)</li></ul>

11. Consumption service industry (Special provision 29 ③)

- Amusement and drinking establishment industry (excluding sightseeing amusement establishment and that for foreigners)  
- Hotel business (excluding tourism and hospitality business)

<b>Other tax incentives</b>	<ul style="list-style-type: none"> <li>- Preferential minimum tax rate (small or medium enterprises 7%, General companies* 10~17%) <ul style="list-style-type: none"> <li>* 8% for 3 years after the grace period given when a small or medium enterprise no longer falls within the scope of a small and medium business and 9% for following 2 years</li> <li>* increase in general companies' minimum tax rate for tax base over KRW 100 billion: 16% <math>\Rightarrow</math> 17% starting from year 2014</li> </ul> </li> <li>- Preferential treatment on ceiling on entertainment expenses</li> <li>- Capital gains tax carried forward following consolidation between small or medium enterprises</li> <li>- Refund by retroactive deduction of losses</li> <li>- Tax deduction for investment outside the over-concentration control region of the Seoul Metropolitan area</li> <li>- Half-yearly payment of withholding taxes (a business which was approved and designated as eligible for half-yearly payment of withholding tax since it had 20 or less full-time employees in the immediate preceding year, excluding those operating financial and insurance business)</li> <li>- Preferential treatment on deadline for installment payment of corporate tax</li> </ul>
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### **Tax incentive system applicable to all of the enterprises**

Tax support for collaborative cooperation, taxation deferment and tax credit for research, human resources development, support for promotion of M&A, tax credit for investment in facilities, corporate tax exemption for agricultural partnerships, etc., corporate tax reduction or exemption for enterprises located in a special research and development zone, corporate tax reduction or exemption for relocation of factory (head office) etc.

## An enterprise that is liable to interim tax prepayment of corporate tax

A corporation whose business year exceeds 6 months is liable to interim tax payment. Corporations stated below, however, are not liable to interim tax payment.

- a corporation newly incorporated in the year of 2015 (excluding those newly incorporated by merger or division)
- a corporation with no income from business due to grounds such as shutdown during interim prepayment period
- a liquidated corporation
- a foreign corporation that does not establish a fixed place of business in Korea
- a special purpose company with no calculated corporate tax in the previous year, an investment company, a special-purpose company, a corporate restructuring investment company, a company specializing in cultural industry stipulated in 「Financial Investment Services and Capital Markets Act」
- a corporation whose business year does not exceed 6 months
- a foreign investment that is entitled to an exemption from corporate tax under Restriction of Special Taxation Act 121-2
- an educational foundation that operates private school stipulated in Article 3 of 「Higher Education Act」, an industry-academic cooperation foundation stipulated in 「Industrial Education Enhancement and Industry-Academia-Research Cooperation Promotion Act」

### **Interim tax return · payment**

Interim tax payment period is from January 1 to June 30. Interim tax return must be filed and paid within 2 months from the end of the six month period, which is August 31.

### **Installments of interim tax prepayment**

In case where the amount of corporate taxes to be paid exceeds 10 million won, installment payments of the following amounts are possible within 1 month of the payment expiration date (2 months for small or medium enterprises).

- Tax exceeding 10 million and under 20 million → the amount exceeding 10 million
- Tax exceeding 20 million won → amount under 50% of taxes to be paid

## Value added tax

The amount of value added taxes payable by an enterprise shall be the amount computed by deducting the value added tax amount withheld when an enterprise is supplied with raw materials or product from the tax amount withheld from the buyer when an enterprise supplies goods or service. VAT is a tax levied on the added value of goods or services created by enterprises at each stage when they are produced, supplied or distributed.

### Value added tax return and payment period

Taxable period for value added tax is 6-months long. Each taxable period is again divided into 2 periods so value added tax return is filed and paid 4 times a year.

Subject to filing				Tax return/ payment period
General taxpayers	First period	Preliminary returns	business performance of 1.1~3.31	4.1~4.25
		Final returns	business performance of 4.1~6.30	7.1~7.25
	Second period	Preliminary returns	business performance of 7.1~9.30	10.1~10.25
		Final returns	business performance of 10.1~12.31	1.1~1.25 of following year
Simplified taxpayers	Business performance of 1.1~12.31			1.1~1.25 of following year

### Computation of tax amount

Output tax amount – input tax amount = tax amount to be paid/refunded tax amount

Output tax	$Sales \times 10\%$
Input tax	<p>Input tax on tax invoice issued</p> <p>Input tax on credit card sales slip</p> <p>Deemed input tax, collected bad debt tax</p> <p>Input tax on recycling of scrapped materials etc.</p> <p>Input tax on tax invoice issued by the buyer etc.</p> <p>(-) common input tax credit for tax-free business</p> <p>(-) non-deductible input tax</p>

## Tax invoice

### **An enterprise that is required to issue a tax invoice**

When a registered trader (general taxpayer) supplies goods or services (excluding supplies of goods or services that are exempt from VAT), he or she shall issue an invoice to the person who received the supply (to the other party) on the date designated under value-added tax law.

### **Function of tax invoice**

Where an enterprise has issues or receives tax invoices, he or she shall submit them to the taxation authority. Submitted tax invoices are used in reconciliation as they are aggregated, sorted and analyzed.

Tax invoice plays a role as supporting document for supply price to an enterprise supplying the taxable goods or services while it is a supporting document of purchase which provides information on costs and becomes criteria for measuring the sales to the buyer.

### **Meaning of issuance of a tax invoice**

Issuance of a tax invoice is an action in which a supplier supplies goods or services and then prepares a tax invoice with details of the supply and issues to the one who is being supplied. Thus, a tax invoice which has been prepared but not yet been issued is ineffective due to lack of issuance action (action of delivering, i.e. by direct delivery, mail). Also, if a tax invoice is prepared and submitted or mailed to the government unilaterally by a supplier without the consent of the one who is being supplied, but the one being supplied is refusing to take the invoice, it cannot be seen as a fair issuance of tax invoice.

### **Issuance-transmission of corporation's electronic tax invoice**

- **Issuance of electronic tax invoice**

Electronic tax invoice stipulated in Article 163 Paragraph 1 of Income Tax Act should be created, issued and transmitted according to the standards of electronic documents introduced in the Article 24 Paragraph 1 of 'Framework Act on Electronic Documents and Transactions'.

- **Time of issuance**

E-tax invoice is regarded as received by the purchaser when it is entered into the inbox designated by the purchaser or when it is entered into the on-line e-tax invoice distribution system of NTS homepage.

In principle, e-tax invoice should also be issued at the time of supply based on Value-Added Tax Act but monthly aggregated tax invoice can be issued by the 10th day of the following month as an exception.

Businesses exempt from value added tax may issue and transmit an e-tax invoice to the NTS but since issuance and transmission of an e-tax invoice is not mandatory, there exists a limitation in increasing the transparency of a transaction. In that sense, corporate taxpayers are required to issue an electronic tax invoice and transmit it to the NTS starting from July 1, 2015. Penalty tax on failure to fulfil the above is expected to be levied starting from January 1, 2016.

### **Major penalty tax**

- **In the case of receiving tax invoice in taxable period to which time of supply belongs**

Assume the case where goods are purchased in April and tax invoice is received in June. Penalty in the amount of 1% of supply price shall be charged to both the seller and the buyer.

- **In the case of receiving tax invoice after taxable period to which time of supply belongs**

Assume the case where goods are purchased in April and tax invoice is received in August, after the taxable period (from January to June). Penalty in the amount of 2% of supply price shall be charged to the seller and there will be no input tax credit for the buyer.

If a buyer files an input tax credit even if he or she is not entitled to an input tax credit, penalty tax on failure to pay regarding the underpaid amount, along with penalty tax on incorrect filing amounting to 10% of input tax and penalty tax for non-submission of aggregated tax invoice on a place of sales basis amounting to 1% of supply price are levied.

Classification	Details	Rate of penalty tax
Delayed transmission	Case where a corporate fails to transmit the e-tax invoice to the NTS by expiration date but transmits it before the 11th day of next month	0.5% of supply price
Non-transmission	Case where a corporate fails to transmit the e-tax invoice to the NTS by the 11th day of the next month	1% of supply price

## Time of supply of goods and services

### Time of supply of goods

- When goods are delivered or made available for cash sales, sales on credit and installment sales
- When each consideration of the contract is supposed to be received in case of long-term installment sales
- When the contractual conditions are achieved or the deadline is passed in cases of conditional or fixed term sales
- When each consideration of the contract is supposed to be received in cases of percentage of completion basis, interim payment condition basis and continuous supply basis

### Time of supply of services

- When the services have been completely rendered or when facilities, rights, or other goods are used
- When each consideration of the contract is supposed to be received in cases of percentage of completion basis, interim payment condition basis, long-term instalment sales, continuous supply basis

**When tax invoice is issued if tax invoice is issued and consideration is received within 7 days from the issuance date before the times of supply of services mentioned above arrive**

## Preliminary return of value added tax

There are two return periods each year: 1st period(1.1~6.30) and 2nd period(7.1~12.31). However, corporations are required to file one more tax return in the interim period between the 1st and 2nd period, which is called the “Preliminary return”.

As procedures for filing final return and preliminary return do not differ much, it can be thought of as filing VAT returns four times a year in the case of corporations. The VAT return should be filed within 25 days after the end of each preliminary return period.

### Required documents for preliminary return

- **Supporting documents for sales**
  - Sales tax invoice in hard copy/tax invoice (electronic/manual)
  - Credit card sales slip/sales details in cash receipts
  - Data of cash sales (retail sales) and other commission sales
    - Cash sales for which a tax invoice, card receipts, cash receipts have not been issued must be separately managed.
  - Additionally required documents by industry
    - Export-Import trade: documents related to zero-rating including a statement of export performance and certificate of completion of report, invoice, trade agreement, L/C, purchase confirmation
    - Leasing real estate: current state of real estate leasing and an altered lease contract when details of lease changes
    - Electronic commerce: sales details of Internet shopping website
- **Supporting documents for purchase**
  - Sales tax invoice in hard copy/tax invoice (electronic/manual)
  - Credit card sales slip/sales details in cash receipts
  - Additionally required documents by industry
    - Export-Import trade: import declaration and others
    - Restaurants: bill related to the purchase of exempted agricultural products or credit card sales slip and cash receipts

\* If required documents are not prepared, expenses actually paid cannot be included in expenses under tax accounting.

### Penalty tax on failure to file preliminary VAT return

If a corporation does not file preliminary VAT return, penalty tax on failure to file returns and penalty tax on non-payment of tax are applied.

- Penalty tax on failure to file returns: calculated tax amount\*20% (in case of general non-filing).
- Penalty tax on non-payment of tax: unpaid or under-paid amount\*0.03%\* the number of unpaid days.

## Withholding tax

When income subject to withholding is paid, a withholding agent should withhold the tax that the taxpayer who is getting paid this income subject to withholding should pay and pay the taxes withheld to the government on behalf of taxpayers. The withholding tax is an earned income tax withheld when employees' wage and salary, bonus, retirement benefits are paid.

Withholding at source	Tax return and payment
<ul style="list-style-type: none"><li>- Withhold at the time of payment of income subject to withholding</li><li>- "Receipt for wage and salary income tax withholding" is issued to the taxpayer</li></ul>	<ul style="list-style-type: none"><li>- Pay taxes withheld to the government by the tenth day of the following month</li><li>- A business which has less than twenty employees on average (excluding financial and insurance activities) may pay taxes withheld to the government each half-year</li></ul>

### Methods of withholding

#### Wage and salary

At each month that wage or salary (including bonus) are paid, a withholding agent withholds income taxes at an amount as shown on the "Simplified Tax Table" and complete the year-end tax settlement by the time the salary for February of the following year is paid with various deductible items submitted by taxpayers.

At each year after the year-end tax settlement has been completed (by withholding agent), NTS confirms the appropriateness of income and tax deductions through computational analysis. Thus, it is more important not to be levied penalty tax because you took excessive deductions by mistake in order to reduce the tax payments.

#### Retirement income · interest income · dividend income · other income · business income

A corporation withholds tax according to the rates of withholding for each kind of income at the time of such payment.

\* Amount of tax withheld by a corporation is exempted as "taxes already paid" when paying a corporate tax on income during each business year.

## Contact

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