

2D Game Design

Finding and choosing players
Publishing near and far:
legal, ethical and review board issues

Admin

- Quiz?
- Project?
- <https://newzoo.com/resources/blog/global-games-market-update-q2-2025>

Player Types: multiplayer games

- Bartle Types
 - Dr. Richard Bartle:
 - Early multiplayer game designer
 - Paper: observed 4 types of players
 - Killer
 - Socializer
 - Achiever
 - Explorer
 - Later expanded to 8 types with tie-ins to psychology

Cultural Market Factors

- Some books suggest thinking about all of your markets from the beginning
 - To make localization easier/better
 - Study out in 2021 with game revenue ranking top national gaming markets
 - <https://www.weforum.org/agenda/2021/08/which-countries-have-the-largest-video-gaming-markets/>
 - Market has grown rapidly in recent years
 - And
 - Top few results on next few of slides.
 - These are NewZoo which have slightly different number – only slightly

Revenue by country

- Next slides capture snapshot of how video game revenue has changed by country over the last 10ish years

2014

Country	market	population	internet	Game Revenue	
United States of America	North America	322,583,006	274,292,330	20,484,628,000	1
China	Asia	1,393,783,836	701,073,270	17,866,677,000	2
Japan	Asia	126,999,808	101,663,346	12,219,552,000	3
Germany	Western Europe	82,652,2567	1,080,940	3,528,196,000	4
United Kingdom	Western Europe	63,489,234	55,476,893	3,426,259,000	5
Republic of Korea	Asia	49,512,026	42,629,854	3,356,202,000	6
France	Western Europe	64,641,279	56,237,913	2,608,818,000	7
Canada	North America	35,524,732	31,890,552	1,717,991,000	8
Italy	Western Europe	61,070,224	36,886,415	1,514,067,000	9
Spain	Western Europe	47,066,402	37,370,723	1,489,366,000	10
Brazil	Latin America	202,033,670	118,593,764	1,339,375,000	11

2019 Results

Country	Market/Region	Pop	Internet	Market(Millions)
• U States of America	North America	329M	274M	\$36,869M
• China	Asia	1,420M	901M	\$36,540M
• Japan	Asia	127M	121M	\$18,952M
• Republic of Korea	Asia	51M	49M	\$6,194M
• Germany	Western Europe	82M	77M	\$6,012M
• United Kingdom	Western Europe	67M	65M	\$5,616M
• France	Western Europe	65M	59M	\$4,091M
• Canada	North America	37M	35M	\$2,772M
• Spain	Western Europe	46M	40M	\$2,735M
• Italy	Western Europe	59M	42M	\$2,689M

Predictions?

- We've seen 11 years ago and 6 years ago
- Next is 2021 results – recent enough for you to pay attention
 - Any predictions on how things will/have changed from 2010s to early 2020s?

2021

Country	Region	Population	Internet Pop.	Revenues (USD)
1.China	Asia-Pacific	1,439.3M	946.4M	\$44,263M
2.United States	North America	331.0M	283.9M	\$42,107M
3.Japan	Asia-Pacific	126.5M	114.9M	\$20,615M
4.South Korea	Asia-Pacific	51.3M	48.6M	\$7,325M
5.Germany	Europe	83.8M	75.8M	\$6,084M
6.United Kingdom	Europe	67.9M	62.2M	\$5,533M
7.France	Europe	65.3M	58.8M	\$4,351M
8.Canada	North America	37.7M	34.1M	\$3,836M
9.Italy	Europe	60.5M	53.3M	\$3,482M
10.Spain	Europe	46.8M	41.8M	\$2,460M

• <https://newzoo.com/insights/rankings/top-10-countries-by-game-revenues/>

Predictions

- How about predictions for last year?

2024

Rank	Market	Revenue (USD)	Players
1	China	\$49.8B	723.0M
2	United States	\$49.6B	224.8M
3	Japan	\$16.8B	74.1M
4	South Korea	\$7.3B	34.0M
5	Germany	\$6.6B	53.2M
6	United Kingdom	\$6.3B	43.4M
7	France	\$4.0B	40.2M
8	Canada	\$3.1B	24.4M
9	Brazil	\$2.7B	123.3M
10	Mexico	\$2.6B	78.1M

<https://newzoo.com/resources/rankings/top-10-countries-by-game-revenues>

Chinese Market

- Large, Lucrative, Tricky
 - In 2021ish were at peak and really “throwing their weight around”
 - More in legal section shortly

US Market

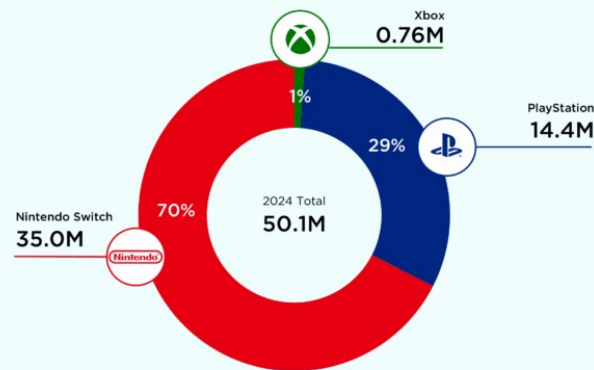
- You are here and we've talked about it
 - Generational changes discussed in your book
 - 25% of gamers are now over 45
 - 46% are female
 - 80% of players play with others.
 - Mixture of console, pc and mobile gaming
- Newest stats I could find (late 2023):
 - <https://www.theesa.com/video-games-remain-americas-favorite-pastime-with-more-than-212-million-americans-playing-regularly/>

Japanese Market

- Japan contributes 9.1% of global games revenue despite just 2.2% of the global player base
- Nearly all console based
- Much more solo play than US, lots of preference for story.

Nintendo represents the lion's share of Japan's console market

Console cumulative units sold
Japan | As of December 2024



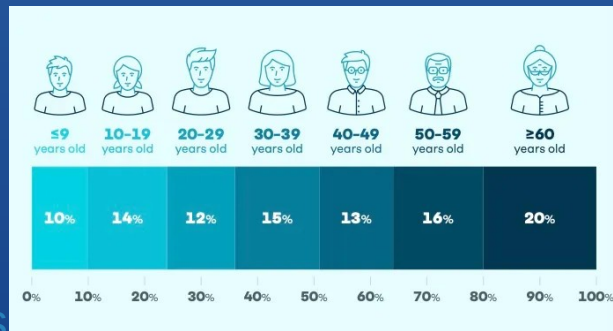
Source: KADOKAWA ASCII Research Laboratories
Note: Xbox includes Xbox One and Xbox Series X/S. PlayStation includes PlayStation 4 and PlayStation 5.

(South) Korean Market

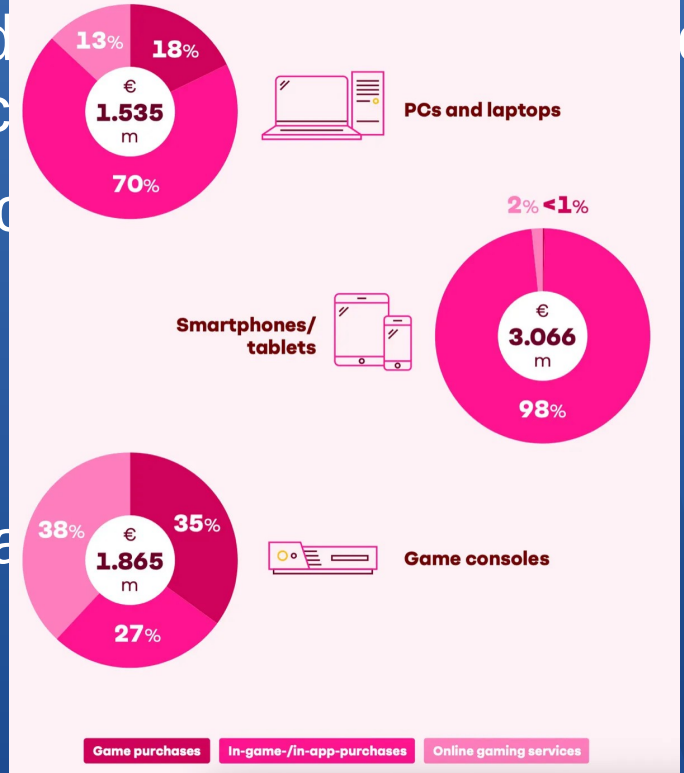
- ESports have been a big deal
 - Watched by 24.4% of men and 11.4% women
 - Not % of gamers, but % of population.
 - Could be effective marketing like streaming is to younger US gamers
- “Users from East Asian countries are the least likely to make purchases through web shops”
 - -GameDevReports about Korean and Japanese players
- A few years ago top gamers recognizable celebrities on par with athletes and entertainers.
 - Can even get some military deferments

German Market

- Mature, saturated market. May have peaked and has stumbled with the German economy receding
- Majority of the revenue is from micro-transactions
 - Except for consoles where plurality is from subscriptions
 - 98% of revenue for mobile, 78% for PC
- Demographics skew much older than US market
-



Consumer behavior varies greatly between gaming platforms



The rest of the top 10

- French Market:
 - also mature. Interesting Copyright laws like Japan, protective of language and culture
- Brazilian Market:
 - mobile accounts for 51.7% of n market, followed by console at 20.5% and PC at 19.4% (console only overtook PC in 2022)
 - Demographics skew younger than US, with most gamers under 50.
 - Source
<https://www.gamesindustry.biz/the-brazilian-games-industry-in-numbers#section-2>
- Mexican Market:
 - Newest entrant to top 10 emerging market with growth potential,

Game Regulation

- When publishing
 - Need to consider not just the players you are targeting
 - But the rules in place in those countries too.
 - Games and software are big business
 - Often big regulation.

In USA

- You are all familiar with this one
 - ESRB
 - Entertainment Software Rating Board
 - Preemptively established in 1994 by industry
 - in response to complaints about direction of games
 - pac-man->mario->street fighter->grand theft auto (hot coffee)
 - purely industry group
 - no government intervention.
 - ESRB also used in Mexico and Canada as of 2019
 - Tell me about ratings – lucky volunteer

ESRB - advisory

- Because the ESRB is an industry group and not based in law
 - Changing mores lead to changing ratings
 - Image from 1975 comic approved by comic code authority for all ages
 - Game on same thing likely E10+ in 1994 when ESRB started
 - What would it be now and why?



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 - Probably M
 - Smoking by main character



Europe - PEGI

- PEGI (Pan-European Game Information,) used by (38 mostly European countries)
 - started as industry initiative
 - Now largely government run.
 - Ratings provided by Netherlands Institute for the Classification of Audiovisual Media (NICAM)
 - National Laws vary if this is advisory or mandatory for purchase
 - Much like MPAA ratings and state laws in US

Australia

- Australia, not a top market, but an interesting English speaking counterpoint
 - one of the most regulated in (western?) world
 - official government agency
 - Office of Film and Literature Classification
 - <https://www.classification.gov.au/>
 - makes policy
 - game must be rated
 - illegal to sell or play if not
 - rating can be withheld
 - usual due process

Australia

- One rating needs more attention
 - RC
 - refused classification
 - banned for sale, hire or public exhibition, carrying a maximum fine of \$275,000 and/or 10 years jail.
 - legal to own unless child porn
 - Lots of state by state differences – lets have a look
 - <https://rating-system.fandom.com/wiki/RC>

China

- For the last few years the most lucrative video game market in the world
 - very protectionist
 - lots of restrictions.
 - Foreign game companies must have Chinese partner
 - Usually Tencent or NetEase
 - government hostility
 - Beijing Reformatory for Juvenile Delinquents claimed in 2007
 - third of detainees were influenced by violent online games or erotic websites when committing robbery and rape etc.

China Game Regulations

- Chinese games must be approved by the National Press and Publication Administration (NPPA)
 - Games not approved (including not yet) can't be released in China.
 - Games will be rejected for
 - Violating basic principles of the Constitution
 - Threatening national unity, sovereignty and territorial integrity
 - Divulging state secrets
 - Threatening state security
 - Damaging the nation's glory
 - Disturbing social order
 - Infringing on others' legitimate rights
 - As of 2021: not showing “correct values”

China Online Games

- China has very strict rules for online games, especially for minors
 - And online games are which ones?

China Online Games

- China has very strict rules for online games, especially for minors
 - And online games are which ones? – all of them, as an anti piracy measure.
 - All people making accounts for online games must include their government ID number (akin to an Social Security number) when creating accounts.
 - Game company must then use government API to determine if that ID belongs to an under 18
 - If so, shifting regs, but something like no more than one hour on weekdays and no more than three hours weekends and holidays.
 - No more than 15 hours over the entire New Years month long holiday.

Tencent

- Tencent is the most common Chinese partner.
 - Works very closely with Chinese government
 - Has used all this money to buy out or by stakes in many gaming companies.
 - The list got long so here are a couple of recent articles,
 - <https://retrostylegames.com/news/tencent-a-company-that-secretly-owns-the-gaming-industry/>
 - <https://www.pcgamer.com/every-game-company-that-tencent-has-invested-in/>
 - What stood out to you there?

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 - What stood out to you there?
 - For me – the discord that nearly every student knows and loves.

Loot Boxes

- The issue of loot boxes as a revenue model has come up
- <https://www.gamesindustry.biz/loot-box-state-of-play-2023-a-global-update-on-regulation>
- Many countries ban them, many more require close scrutiny and disclosure
- Lawsuits as of last year still in US

Real money currency

- At various time and places, games have let you trade real money for in-game currency
 - And allowed the swap of in-game currency for real money
 - The real money → in game currency → real money loop
 - What are the potential issues for the game?

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 - Taxes
 - Money laundering
 - Others?

Government Monitoring

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 - Ostensibly why?

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 - Ostensibly why?
 - Well Remember Jack Teixeira from down the road?
 - <https://www.businessinsider.com/guardsman-online-gaming-chat-where-secret-us-intelligence-leaked-report-2023-4>
 -

Game Addiction

- Some governments very concerned with 'gaming addiction'
 - Addiction messes with dopamine pathways and nearly always requires a substance
 - Only exception US recognizes so far is gambling.
- So is it gaming addiction? Or poor self control?
 - Class?

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- Some governments very concerned with 'gaming addiction'
 - Addiction messes with dopamine pathways and nearly always requires a substance
 - Only exception US recognizes so far is gambling.
- So is it gaming addiction? Or poor self control?
 - China and parts of Europe says Addiction.
 - So far US says poor self control.
- Blaming games is not really very new
 - <https://theconversation.com/games-blamed-for-moral-decline-and-addiction-throughout-history-123900>

Video Games and Violence

- No discussion of games, regulation and government would be complete without acknowledgment of the games and violence debate.
- The scientific literature is mixed
 - <https://www.psychologytoday.com/us/blog/the-realities-of-refugee-screening/202502/the-effects-of-gaming-on-kids-aggression-and>
 - Really interesting finding from Sept 2024
 - Playing a *lot* of video games is positively correlated with violence but playing violent video games in moderation is not.
 - <https://link.springer.com/article/10.1007/s10826-024-02864-5>
 -

Video Game Violence

- Video Game violence is rare, but it makes for big news
 - And occasionally science
 - 23 heart attacks by youth playing video games in the last 20 years
 - <https://www.physiciansweekly.com/post/analyzing-the-cases-of-sudden-gamers-death-non-violent-deaths-related-to-video-games>
 - Speaking of playing too much (2013) Nathan Brooks shoots parents for taking away games
 - <https://www.courts.wa.gov/content/PublicUpload/eclips/2014%2001%2009%20Adult%20charges%20filed%20against%20Moses%20Lake%20boy.pdf>
 - so angry that his parents grounded him and took away his games, opened the gun safe and emptied the .22 pistol into his parents while they slept
 - They survived, but he got to make a movie about it
 - <https://www.amazon.com/Shot-My-Parents-Elizabeth-Brooks/dp/B07PRGT0B3>

Grand Theft Real Life?

- GTA is a frequent target of critics
 - Especially when perpetrator in high profile cases cite its inspiration
 - Ryan Stone plays GTA in real life on Colorado
 - Gets 160 years
 - <https://www.denverpost.com/2015/10/30/ryan-stone-sentenced-to-160-years-in-prison-for-high-speed-chase/>
 - Anthony Clark too (2018)
 - https://www.oregonlive.com/pacific-northwest-news/2018/06/car_thief_on_lsd_thought_he_wa.html
 - Lest we think it is all from the 2010s
 - <https://espnswnfl.com/2024/01/24/real-life-gta-florida-teens-cause-50000-in-damage-during-video-game-crime-spree/>

Swatting

- Of course some gamers get the Police to do their killing for them:
 - Sept 2019 Casey S. Viner gets 15 months in prison
 - <https://www.cnn.com/2019/09/14/us/swatting-sentence-casey-viner/index.html>
 - Was a minor at the time
- Lest you think it is in the past
 - 'Next door' in East Providence Sept 2025
 - <https://turnto10.com/news/local/east-providence-home-swarmed-police-swatting-linked-video-game-rhode-island-september-8-2025>
 - At least the Police aren't shooting immediately any more

Huh? What?

- This decade
- Father is so caught up in video games that not only doesn't he realize his child is gone, doesn't hear police banging on door.
 - <https://www.cenlanow.com/crime/father-of-lost-toddler-arrested-allegedly-playing-video-games-when-child-wandered-off/>
 -

Perspective

- Are these (mostly) small percentage incidents?
 - Yes
- Do we as an industry still need to deal with them?
 - Yes, because they sometimes have an out-sized impact on the perception of the industry.

Law and games

- Law and punishments?
 - existing laws
 - hacking etc
 - Chinese law can lead to fines or jail time for game company execs.
 - virtual property
 - habbo hotel 'thief'
 - games and RMT
 - taxes
 - <http://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1111&context=violt>