

# 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
•	<a href="https://newzoo.com/insights/rankings/top-10-countries-by-game-revenues/">https://newzoo.com/insights/rankings/top-10-countries-by-game-revenues/</a>				

# 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

# Chinese Market

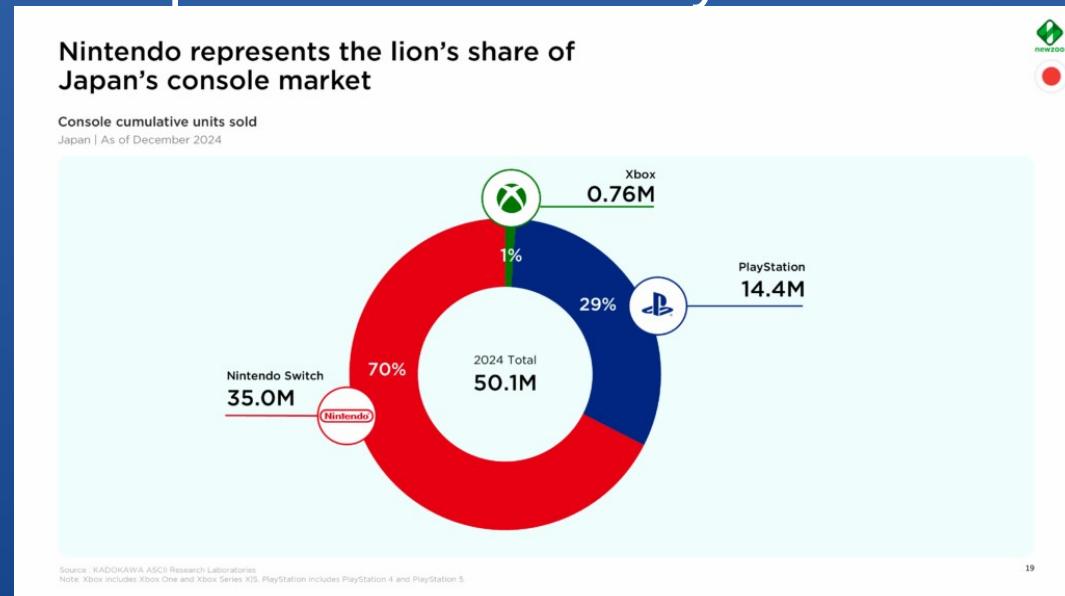
- Large, Lucrative, Tricky
  - In 2021ish were at peak and really “throwing their weight around”
  - More in legal section shortly

# 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.

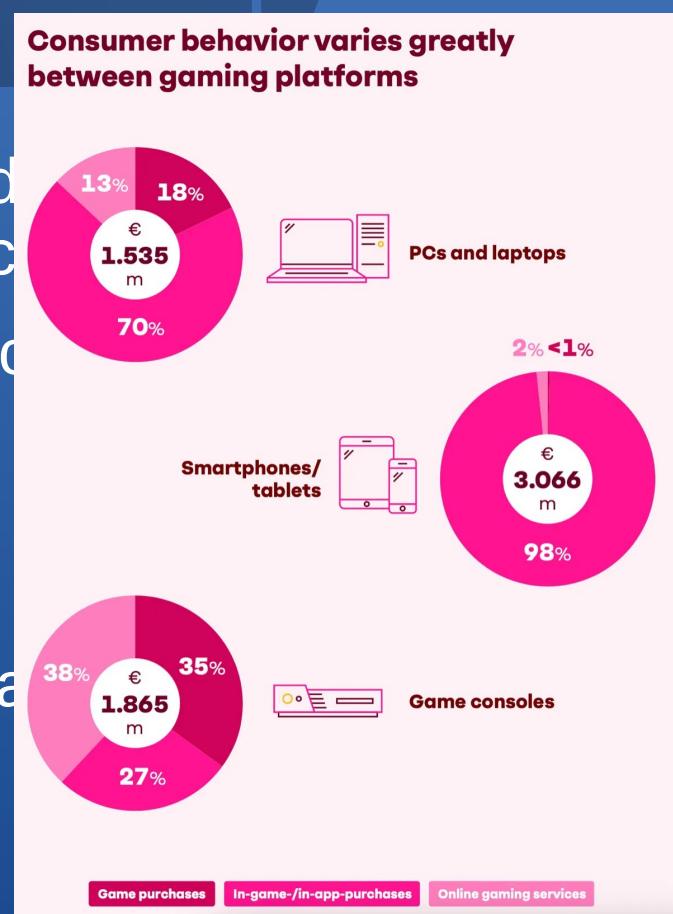
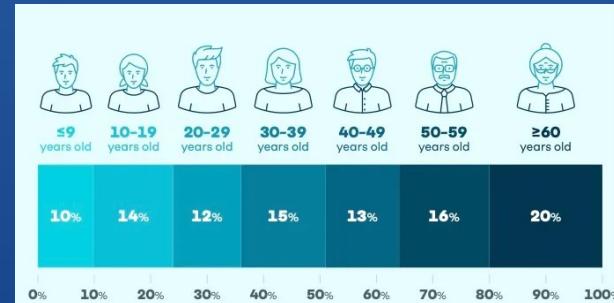


# (South) Korean Market

- E-Sports 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
- Has stumbled with the German economy recently
- 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
- 



# 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 the 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, none of the usual sites had done a profile of this playerbase

# 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?

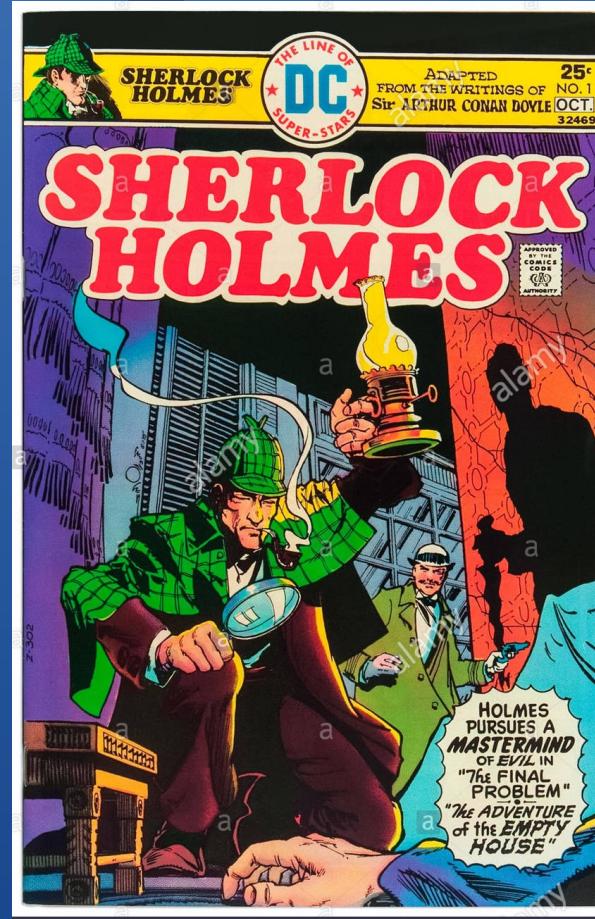


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    - Probably M
    - Smoking by main character



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## 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

- For the last decade or so, governments have started monitoring in-game chats and game related forums
  - 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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  - Addiction messes with dopamine pathways and nearly always requires a substance
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- 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 acknowledgement 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/B07PRGTQ3>

# 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](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://espnswfl.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=1114&context=yjlt>