

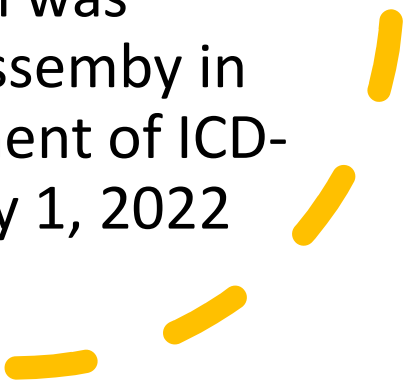
The background is an abstract composition of organic, flowing shapes in shades of purple, blue, green, and black. The colors are layered and blended, creating a textured, almost painterly effect. The purple is the most prominent, covering the top and right sides. Blue and green shapes are more concentrated on the left and bottom-left. Black shapes are visible in the bottom center and bottom right.

# Videogaming 2022

The State of Play

A large orange shape on the left side of the slide, consisting of a rectangle with a quarter-circle cutout on its right side.

Where we  
left 2019

- Violence little evidence
  - Virtual Assault
  - Addiction Litigation
  - The World Health Organization (WHO) had proposed and later included "gaming disorder" in the 11th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-11), released in June 2018, which was approved by the World Health Assembly in May 2019. the use and enforcement of ICD-11 is expected to start on January 1, 2022
- 
- Four short, curved yellow lines arranged in a semi-circular pattern at the bottom right of the slide.

A large orange shape on the left side of the slide, consisting of a rectangle with a quarter-circle cutout on its right side.

# Gaming 2022

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Where is the Industry Now

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Virtual Assault & Privacy

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Algorithm & social bias

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Addiction Litigation

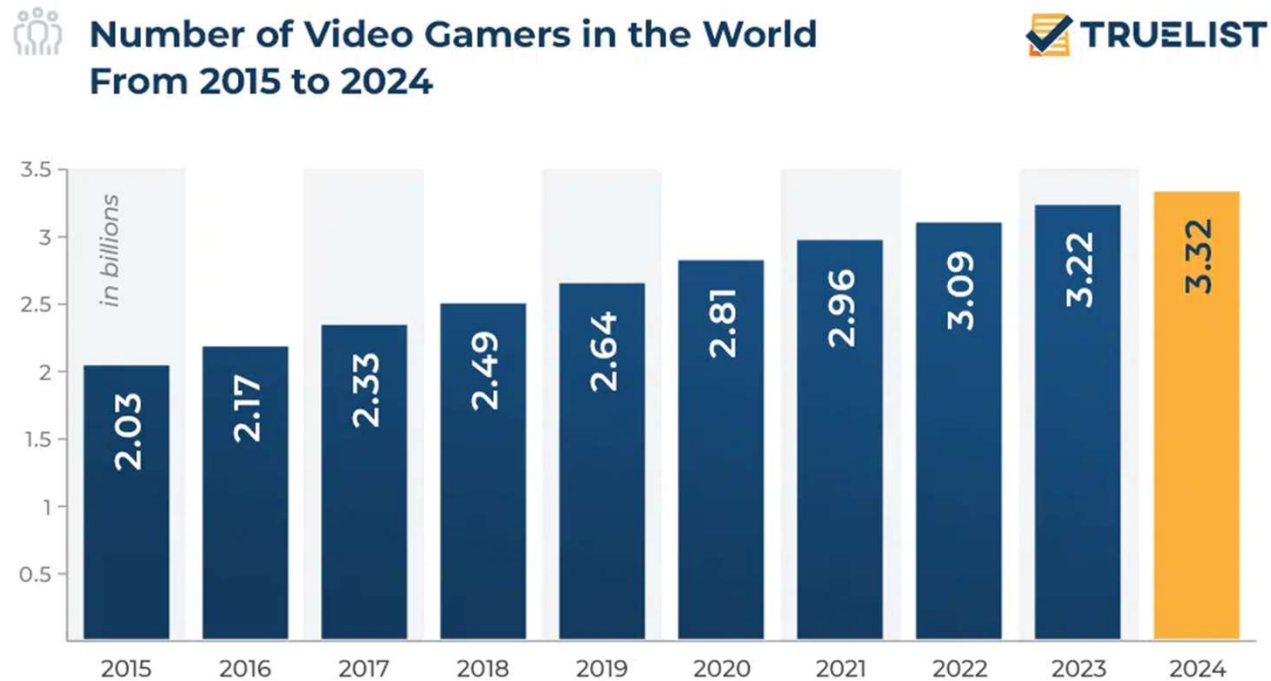
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Environmental Impact

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Why Videogame at all?

# The Industry Today



Source: Marketer

# Gaming Statistics

Approximately 3 billion gamers in 2021

People between the ages of 18 to 34 account of 38% of gamers globally

In the USA 45% of gamers are female, 55% male

Research showed globally in 2019 the 48% of gamers were female.

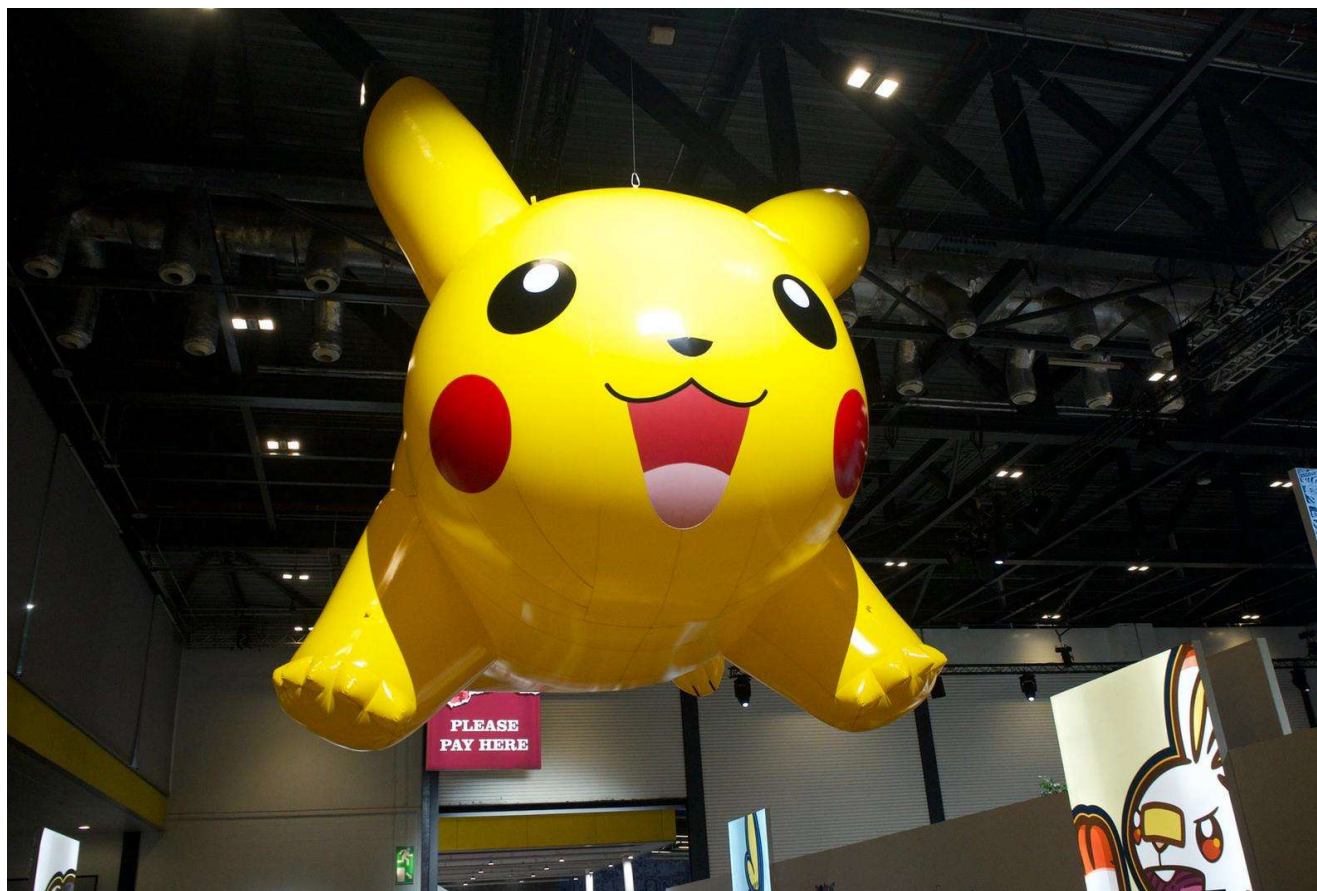
The gaming industry is set to grow at a compound annual growth rate of 12% between 2020 and 2025



# Asia

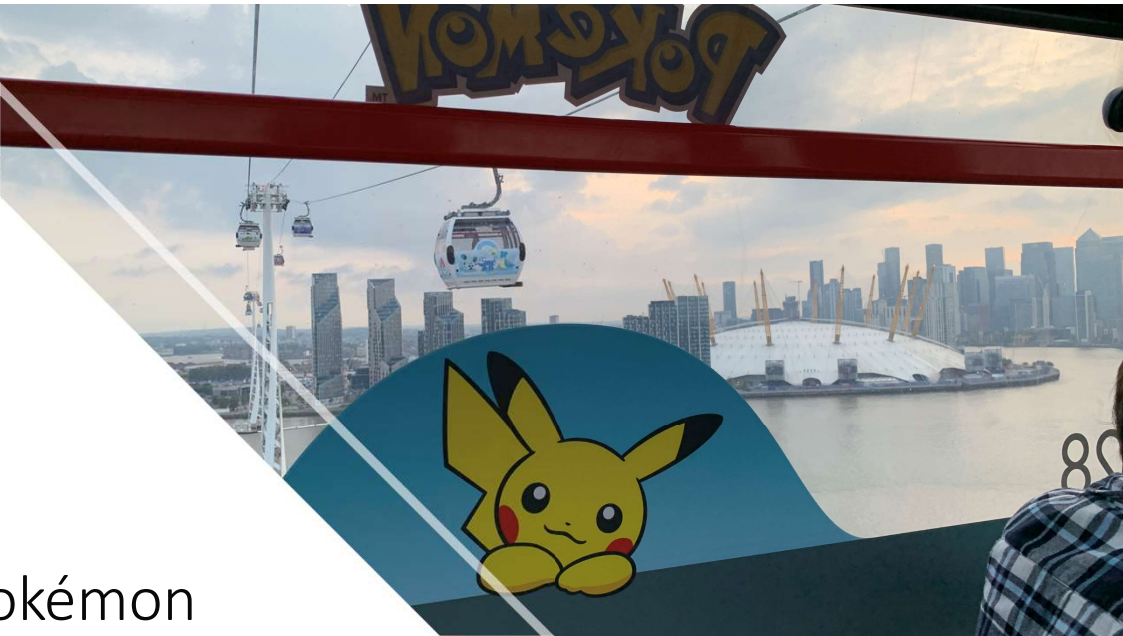
- Asia Pacific is predicted to be the largest gaming market share between 2020 and 2027
- Japan, China and South Korea show a high potential for this market's growth
- China has seen considerable Covid-related growth in it's gaming business



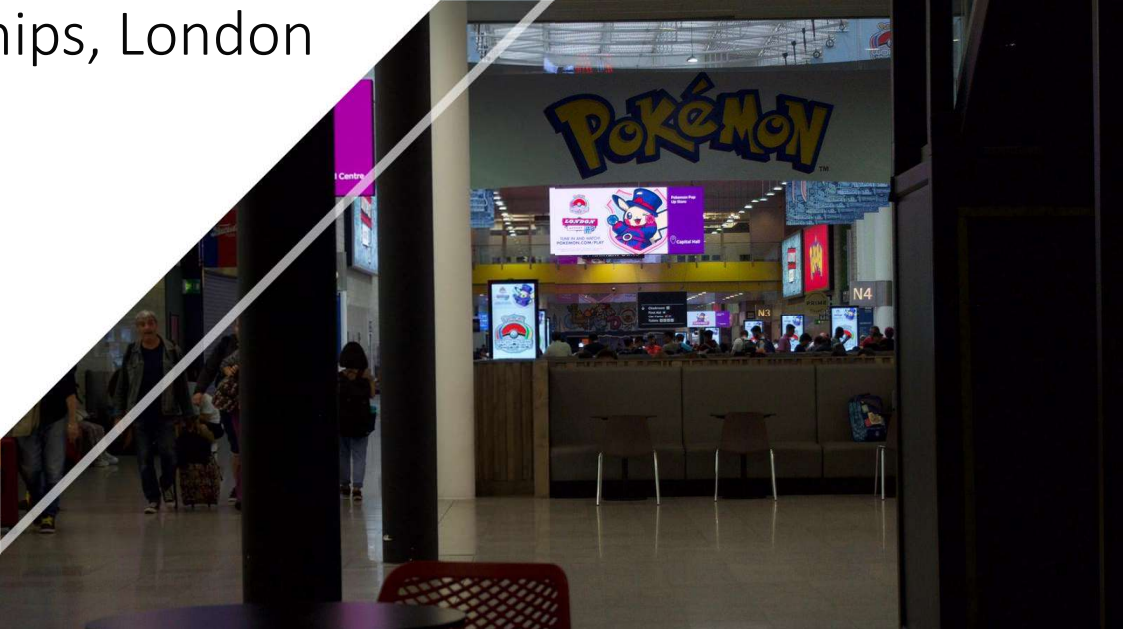


Pokémon  
Continues to  
Grow and  
Grow



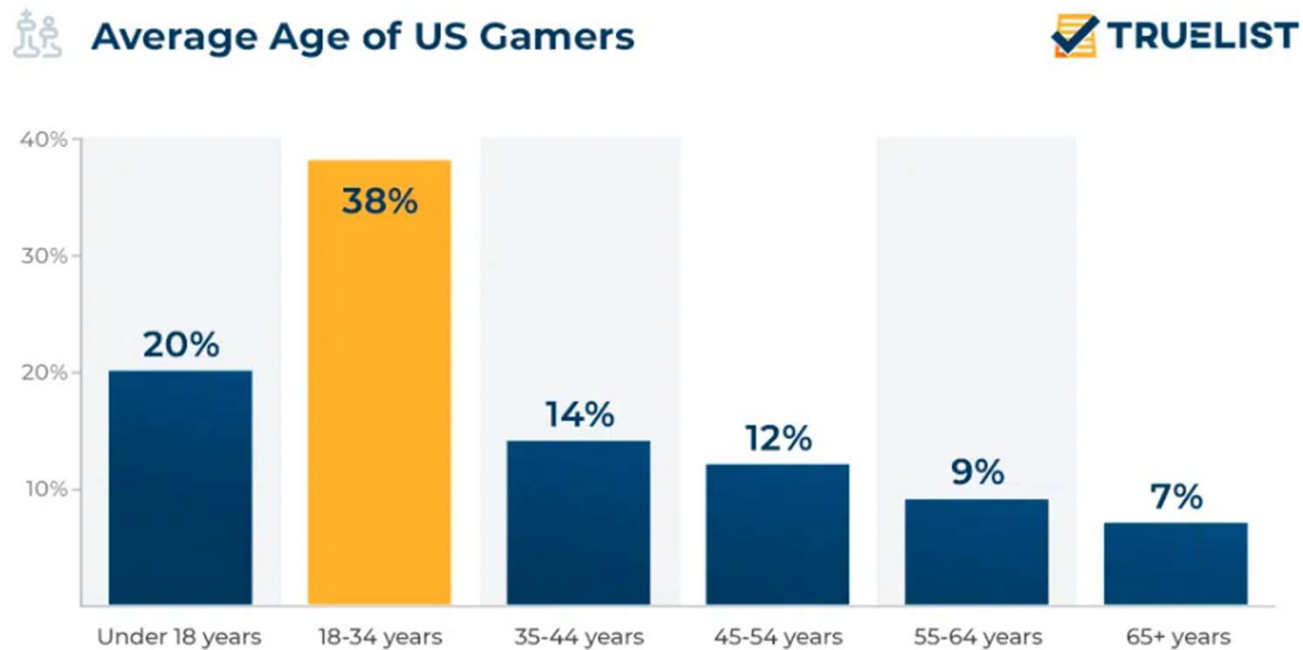


2022 Pokémon  
Championships, London





# Average Ages of Gamers



Source: Statista

# Videogaming 2022

40% of US Gamers make in app purchases

Approximately 74% of parents in the US played video games with their children on a weekly basis. In 2020 this figure was 55%.

The UK Videogame market reached over GBP 7.16bn in 2022. Of this the Nintendo Switch made up GBP 1.13bn of the sales.

# Gaming Addiction

- Daunting Gaming Addiction Statistics.
- About 22% of gamers spend around 61 to 80% of their time playing multiplayer online games. It is reported that these multiplayer online games are the most addictive, with Fortnite being one of the most cited as being addictive.
- Between 1% and 10% of the population of North America and Europe suffer from internet gaming disorder.
- This figure varies across countries. For example, around 0.3% to 1% of adults in the UK, US, Germany, and Canada receive the diagnosis of IGD. Game addiction is common in many other parts of the globe, gaming addiction stats show. For instance, South Korea declared this issue a public health crisis, with over 600,000 children suffering from it. With 22.8%, Iran, however, has the highest game addiction rate. Age-wise, 8.4% of children and teens have problems with game addiction. And while gaming is considered a male-dominated domain, research indicates that women are more susceptible to addiction to mobile games than men.
- (Healthy Gamer)



In 2019 the World Health Organization recognized “Gaming Disorder” as a mental health condition. It will be officially added to the international classification of diseases in 2022

- 3-4% of gamers are addicted to video games. Around 60 million people or more are suffering with gaming disorder.
- 8.5% of youths aged between 8-18% suffer from gaming disorder.
- The average age of a gamer is 35 years old whereas the average age of a gaming addict is 24 years old.
- 8.5% of children and teenagers under the age of 18 may be addicted to gaming.
- 90% or more of all children play video games.



48% of Gamers are female

- However 94% of gaming addicts are males. This issue might be closely related to how males perceive gaming cues in their brains.
- According to a study from 2018, “gaming-related cues elicit higher cravings in male subjects than female subjects.” <https://academic.oup.com/scan/article/13/11/1203/5110390> ×The study found that males had greater activation in the striatum before gaming and great activation in the medial frontal gyrus after gaming. This tells us male gamers are more likely to get addicted to video games

# Hampshire CAHMS

What it might look like, or feel like, if someone is struggling with problematic gaming:

- Constantly thinking about, or wanting to play the game;
- Feeling irritable and restless (fidgety) when not playing;
- Under reporting, or lying about how much time they've spent playing, or playing in secret (such as in the middle of the night);
- Tiredness, headaches or hand pain from too much screen time, and use of controllers;
- Not wanting to pay attention to things such as personal hygiene (eg, washing) or eating;
- Not seeing friends as often, or doing other things they used to enjoy doing, as all their time is spent gaming/ online;
- Not wanting to go to school so that they can game;
- Sleep disturbance (difficulties getting to, or staying asleep, or restless sleep with or without nightmares).





# The Priory

As part of an addiction programme, [different therapy types](#) will be used to help overcome gaming addiction. These include:

**Cognitive behavioural therapy (CBT)** - a talking therapy which is often used to treat many types of addiction, as it looks to proactively address the underlying reasons for why you might be stuck in a pattern of excessively playing video games.

**Family therapy** – family therapy for gaming addiction can be particularly useful for addressing any issues in the home which may be causing you to turn to video games as a way to avoid confrontation.

**Self-help and group therapy** - group therapy sessions can be particularly useful when attempting to overcome your gaming addiction. They allow you to accept that your addiction is not unique to yourself, and realise that others have gone through precisely the same process.

If your gaming addiction is particularly severe, it may be recommended that you become a part of our [inpatient treatment](#) and 12-Step rehabilitation programme. This is an environment where there is no or limited access to gaming technology, with additional focus on learning behaviours to cope with dual diagnosis of other mental health conditions such as depression, anxiety or stress which may be encouraging addictive gaming behaviour.

# Addiction Litigation



DOES ADDICTION EXIST?



SHOULD WE LITIGATE AT  
ALL?



# Opiates

- 25 February 2022 Johnson and Johnson and the big 3 distributors McKesson, Amerisource Bergan and Cardinal Health finalized a USD 26 billion opioid settlement to resolve their liabilities over 3,000 opioid crises-related suits nationwide
- But this is just one.





- Purdue Manufacturer USD 5.5 to USD 6n settlement plan
- Teva USD 4.2bn agreement in principle announced 26 July 2022
- AvvVie's Allergan Unit USD 2.37bn agreement
- Endo bankruptcy filing USD 450 million.

# Tobacco

- In 1998 52 state and territory attorneys signed the Master Settlement Agreement with the 4 largest tobacco companies in the US to settle dozens of state lawsuits to recover billions of dollars in health care costs associates with treating smoking related illnesses.
- More than 45 companies settled.
- The estimated cost was USD 206 billion.





## Problem drinkers account for most of alcohol industry's sales, figures reveal

**Exclusive: Firms claim to support responsible drinking, yet data shows those who consume at risky or harmful levels account for 60% of sales in England**

Sarah Boseley *Health editor*

Fri 22 Jan 2016 16.00 GMT



2,285



📹 New year mayhem in Manchester in an image that went viral. The drinks industry is accused of relying on excessive consumption to boost its profits. Photograph: Joel Goodman/LNP

The alcohol industry makes most of its money - an estimated £23bn a year - from people whose drinking is destroying their health, say experts who accuse the industry of irresponsible marketing.

While the industry points to the fact that most people in the UK are moderate drinkers, 60% of alcohol sales are either to 'harmful' drinkers or those - labelled harmful drinkers - who are causing potentially lethal damage, figures seen by the Guardian.

Work by Prof Nick Sheron of Southampton University

# Alcohol





## £27 billion a year

Public Health England estimates that alcohol costs the UK at least **£27 billion a year**. Yet over the past five years, alcohol duty has raised just £10.5-£12.1 billion annually. Mar 1, 2021

# Gambling

- Gambling disorder has long been included in formal classification systems and epidemiological surveys, but Gaming disorder was introduced as a new condition in the 11th revision of the International Classification of Diseases (ICD-11) endorsed by the 72nd World Health Assembly (WHA72) in **2019**.
- Research published by Public Health England (now the UK Health Security Agency) last September estimated **around 0.5% of the adult population, around 246,000 people, are likely to have some form of gambling addiction** with around 2.2 million people either problem gamblers or at risk of addiction. Feb 19, 2022

- **Two new gambling clinics will open in England this year, the NHS announced today as it faces record demand for specialist support for gambling addiction.**
- The two new clinics, based in Southampton and Stoke-On-Trent, will open from May and mean there will be seven specialist clinics in place across England.
- The other five NHS gambling addiction clinics in London, Leeds, Manchester, Sunderland and a national children and young person's pilot clinic will inform the rollout of further gambling clinics when the services are evaluated later this year.
- The north of England has [the highest prevalence of at-risk gamblers](#), with 4.4% of adults in the North West and 4.9% in the North East being at the most risk of addiction.
- Between April and December last year, 668 people with the most severe gambling addiction issues were referred to NHS gambling clinics – up from 575 during the same period in 2020 – a 16.2% increase.

- [Research published by Public Health England](#) (now the UK Health Security Agency) last September estimated around 0.5% of the adult population, around 246,000 people, are likely to have some form of gambling addiction with around 2.2 million people either problem gamblers or at risk of addiction.
- **NHS mental health director Claire Murdoch said:** “Gambling addiction is a cruel mental health condition that can devastate people’s lives – our pilot clinics are already having a lasting impact in helping people to take back vital control of their lives.
- “The opening of two new gambling clinics in May, as a part of our £2.3 billion investment into mental health services, will mean we can help even more people with the most serious gambling problems.
- “It is also absolutely right that the NHS now funds these clinics independently, recognising the harmful effects this addiction can have on the nation’s mental health, and that predatory tactics from gambling companies are part of the problem, not the solution”.



# Gambling and the Videogaming Industry

# Loot Boxes

- Rob Davies, Guardian 2 April 2021
- A study has shown that loot boxes are linked to problem gambling
- Belgium has deemed loot boxes to be gambling products
- Analysis revives calls for in-game rewards to be classed as betting products to protect children.
- Loot box features are used by nearly 40% of children
- Structurally and psychologically akin to gambling.
- Loot boxes remain unregulated in the UK.

# New South Wales Study

- Social Casino Games

- **What simulated gambling in video games looks like**

- **Social casino games**

These look and work like games in a casino but, instead of playing for money, you win points or in-game currency like coins or jewels. Sometimes players spend more to unlock special features or collect more points

- **Virtual goods like weapons or character upgrades**

Maybe you can buy or earn virtual goods, or maybe you can trade them in the game. They could even be traded online for real money.

- **Loot boxes**

A loot box is a reward you can win or buy during a game. What's in a box is the luck of the draw. There's no skill involved, so it's a lot like gambling. The cost can add up if you buy loot boxes using real money.

# Unconscious Bias & Algorithms, and Bias

- Eric Peckham Confronting racial bias in the videogaming industry 21 June 2020
- Percentage of gamers
- Percentage of game makers
- Character Representation



# Sexism & Gender Bias

Keza MacDonald, Guardian 22<sup>nd</sup> July 2020 “Is the video games industry finally reckoning with sexism.

A Toxic male fratculture

Alina Polianskaya 20 February 2019 “Are video games inherently sexist? Designers and game makers discuss.”

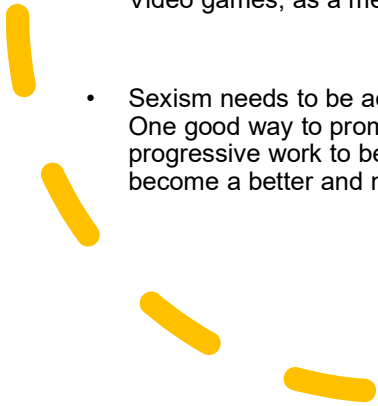
Stereotypes and clichés falling victim to harassment and violation.

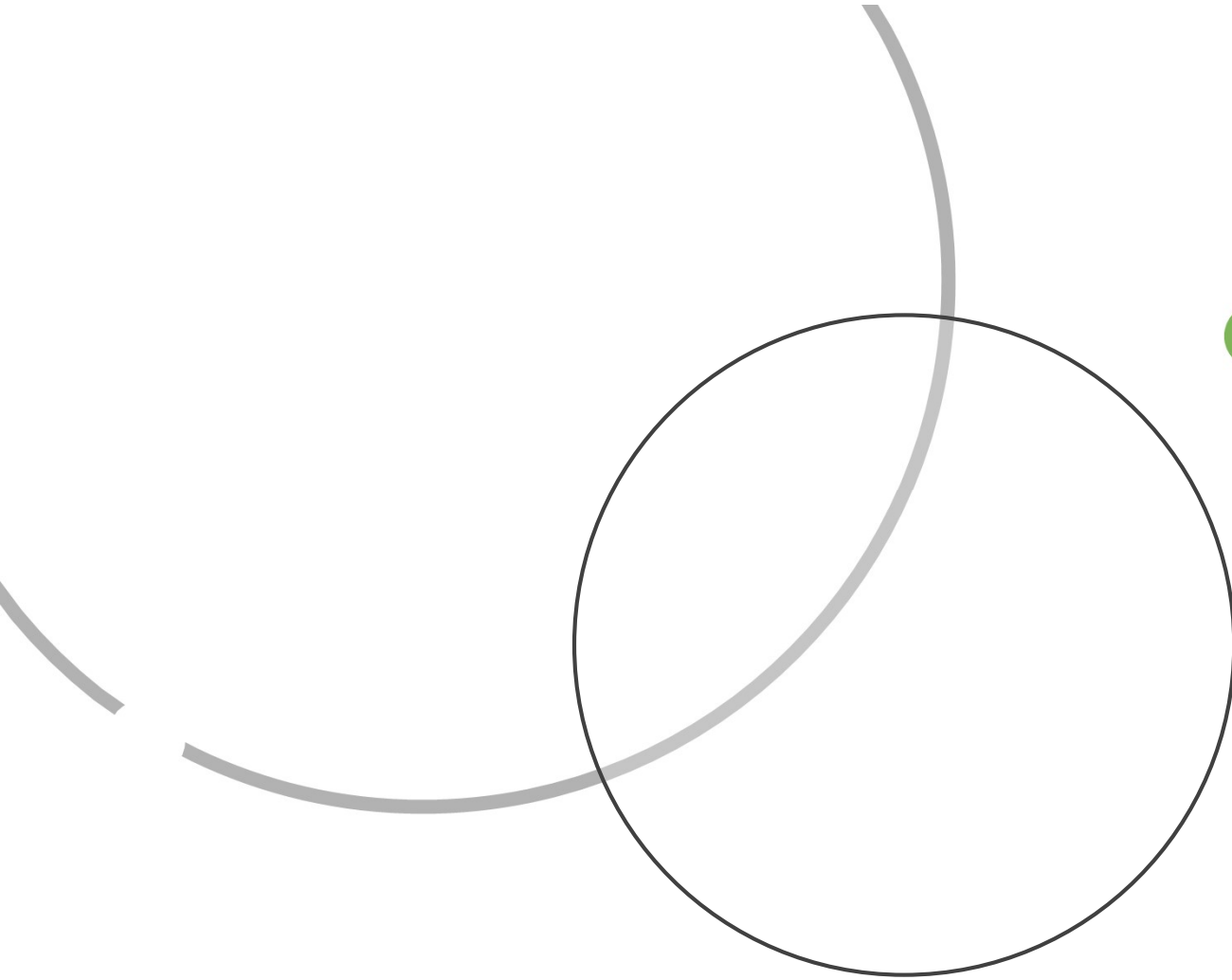
Pokémon remakes with players given the option to play girl characters



# A changing industry

- Nina Freeman, game designer, Fullbright. Photo: ©NashCo Photography.
- “When addressing issues around sexism and sexualisation of women in games, it’s important to remember that AAA games — blockbuster, mass market games by major publishers, like Call of Duty or Grand Theft Auto — that are often referenced in these conversations aren’t actually the only games out there.
- Nor should they represent the industry as a whole. There’s a vast body of work, mostly by independent creators, that does include positive, complex and interesting depictions of women — games by developers and designers such as Christine Love, Lea Schönfelder, Bahiyya Khan and Jenny Jiao Hsia, for example. For people who are interested in supporting work by and about women that does not adhere to sexist stereotypes, then I’d recommend looking at games by those creators.
- I do think video game culture has earned its reputation of having poor representation of women, but that is because of deeper cultural issues that plague all art. Video games, as a medium, aren’t inherently sexist — it’s the creators and the cultures they function in that are the problem.
- Sexism needs to be addressed at a deeper level in our societies and cultures before we can see more positive representation of all minorities and women overall. One good way to promote this sort of cultural change is to support and signal boost work by women and minorities. It’s easy for smaller creators who are doing progressive work to be forgotten in light of whatever news splash the big AAA games are making, so supporting their work is imperative if video games want to become a better and more inclusive space.”





# Algorithms

Are they just a digital echo chamber?

# The Environmental Impact

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# Environmental Impact

- The surge of video conferencing and streaming has fuelled concerns about the emissions they generate.
- An hour of streaming in Europe has a carbon footprint equivalent to boiling an electric kettle three times or driving 250 metres.
- Between February and April last year, at the peak of worldwide lockdowns, global internet traffic surged by nearly 40%.
- Web traffic is set to double by 2022.
- Studies estimate that digital technologies already contribute between 1.4% to 5.9% of global greenhouse gas emissions.

# But is it true?

- Data centres that process and store data from online activities, such as emailing and video streaming, accounted for about 1% of global electricity use in 2019, [IEA analysis shows](#).
- Yet despite a 60% surge in demand for data centre services, the energy required to power this is [estimated to stay flat until 2022](#), says the IEA, citing a [February 2020 study](#) led by U.S. engineering professor Eric Masanet at Northwestern University.
- This is because, compared to other industries, data centres have generally become more energy-efficient and companies are increasingly investing in renewable energy to cool down their servers, said IEA researcher George Kamiya

# Nina Lövehagen, The Ericsson Blog, 10 February 2020

- Comparing Apples with Pears – ICT vs Civil Aviation

- The ICT sector's carbon footprint of 730 million tonnes of CO<sub>2</sub>-eq almost matches the 800 million tonnes of CO<sub>2</sub> emissions from burning fuel across the aviation industry – 80 percent of this associated with travelling. However, that number excludes the production of the fuel, the footprint of airplanes, the operation of airports and high-altitude effects. Moreover, it does not consider that the difference in number of users is huge. Approximately 70 percent of the global population use ICT, but it is estimated that only 10 percent of the global population use aviation services on a yearly basis. The sectors clearly do not compare if scopes are set equal, and especially not in terms of emissions per user. To illustrate this, we calculated for how long time you could use your smartphone before it caused the same emissions as the fuel used per person on a transatlantic return flight (including aviation effects). It turned out to be 50 years – and that even included the use of networks and data center. Clearly it is a great thing to hold your international meetings online when you can.
- Even though ICT represents a small share of global carbon emissions, it is our responsibility to reduce its footprint in absolute numbers. The good news is that, to a large extent, the carbon footprint of ICT depends on electricity consumption which is the easiest energy carrier to decarbonize. This holds true for network operations, data center operations and device usage, as well as – perhaps more surprisingly - the other life cycle stages. If the ICT sector and its users switch exclusively to electricity from renewable energy sources, then the carbon footprint could be reduced by as much as 80 percent.
- This gives a great opportunity for ICT companies to invest more in renewable energy to decarbonize their business. Already today, many major ICT companies are investing a lot in renewables and taking action to reduce their footprints and that should expand. At Ericsson, for example, we have halved our footprint and are now working towards an [SBTi approved 1,5oC decarbonization target](#).
- Firstly, let's get some numbers right. Streaming and internet surfing do not usually require the electricity levels mentioned in many discussions. For example, streaming a movie for two hours to a large screen every night for a year consumes about 25 percent less electricity than running a modern, energy-efficient refrigerator for a year. And chances are that the tea you drink while watching a movie on your smartphone will use as much electricity as the movie. Also, surfing the internet on your smartphone for three hours uses about the same amount of electricity as having two 7W LED lamps lit for the same time. Read other comparisons in the [digital carbon footprint report](#)

# Positives of the Gaming Industry

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# Neuroscience and learning through play: a review of the evidence.

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- Claire Liu Lyneth Solis, Harvard University
- Hanne Jensen, Lego Foundation
- Emily Hopkins, University of Scranton



BBC Research & the National Literary Trust, the  
Association of UK Interactive Entertainment,  
Penguin Random House

- Surveyed 5,000 11 to 16 year olds.
- 79% said they read lots of content about video games including books, reviews, blogs in game communication and fan fiction
- 35% felt that playing video games made them better readers
- Gaming made them more creative. 63% involved said that they wrote video game related content including scripts, top tips for other players and reviews.
- 58% said that they would write and design their own video games
- A third said that they wanted more opportunities to write about video games at school

- Gaming had a positive impact on the mental health of those surveyed. Many said that it helped them deal better with stressful situations and negative emotions
- Game writer Rhianna Pratchett
- “Video games transport us into new worlds, new experiences and make us feel part of the story like no other medium. It’s no surprise that young people’s engagement with video games is at an all-time high.”

# Classical Music

- A poll by the Royal Philharmonic Orchestra suggests that video game music teaches young people about classical music.
- The orchestra's managing director James Williams told the *Telegraph* that computer games are an important 'access point' for young people to experience classical music for the first time:
- Children aged six to 16 were asked about how they experience classical music; around one in six said they listened to it, 'when it's part of a computer game I'm playing.'

# Art



# Conclusion



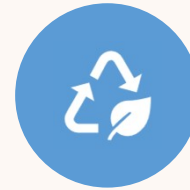
METaverse IMPORTANT  
QUESTIONS PERSONAL  
SECURITY AND DATA  
PRIVACY



IT'S GOING TO GROW AND  
GROW.



ADDICTION – A CLOSE  
MONITORING & DIALOGUE  
WITH THE INDUSTRY



ENVIRONMENTAL



THE POSITIVES



A FINAL CONVERSATION  
50:50