



Pyspark Project: VideoGames Data Analysis

Fonte

- ▶ 1) vgsales.csv - <https://www.kaggle.com/datasets/gregorut/videogamesales>

vgsales.csv

O dataset vgsales.csv contém uma lista de jogos com vendas superiores a 100.000 cópias. O arquivo foi gerado pelo processo de web scraping no site vgchartz.com.

Disposição dos dados:

Rank		Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sales
0	1	Wii Sports	Wii	2006	Sports	Nintendo	41.49	29.02	3.77	8.46	82.74
1	2	Super Mario Bros.	NES	1985	Platform	Nintendo	29.08	3.58	6.81	0.77	40.24
2	3	Mario Kart Wii	Wii	2008	Racing	Nintendo	15.85	12.88	3.79	3.31	35.82
3	4	Wii Sports Resort	Wii	2009	Sports	Nintendo	15.75	11.01	3.28	2.96	33.00
4	5	Pokemon Red/Pokemon Blue	GB	1996	Role-Playing	Nintendo	11.27	8.89	10.22	1.00	31.37

- ❑ O 'Rank' é a classificação das vendas gerais e esta diretamente ordenado pelo valor de 'Global_Sales'.

vgsales.csv

Na análise é considerado o período de gerações dos consoles para segmentar os dados, sendo que para este estudo será examinado da 2ª geração até a 7ª geração, devido a limitação dos dados.

Períodos geracionais dos consoles:

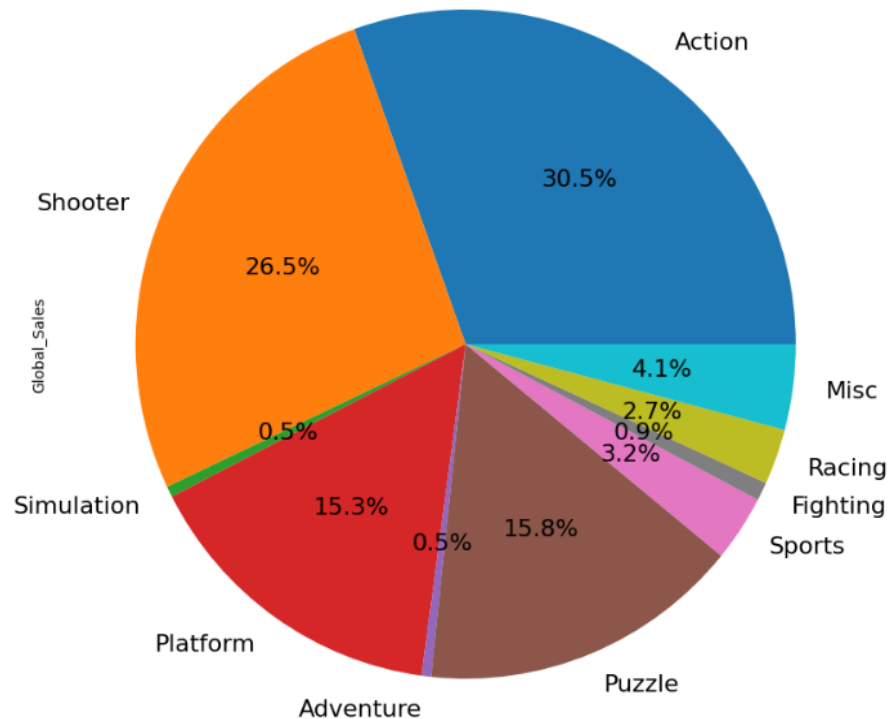
- Primeira geração (1972–1978)
- Segunda geração (1976–1984)
- Terceira geração (1983–1990)
- Quarta geração (1987–1996)
- Quinta geração (1993–1999)
- Sexta geração (1998–2004)
- Sétima geração (2004–2010)
- Oitava geração (2011–2020)
- Nona geração (2020–Atual)

vgsales.csv

Detalhes dos dados	Quantidade
Linhas	16598
Colunas	11
Registros nulos	329
Plataformas de console (Platform)	31

Atari 2600

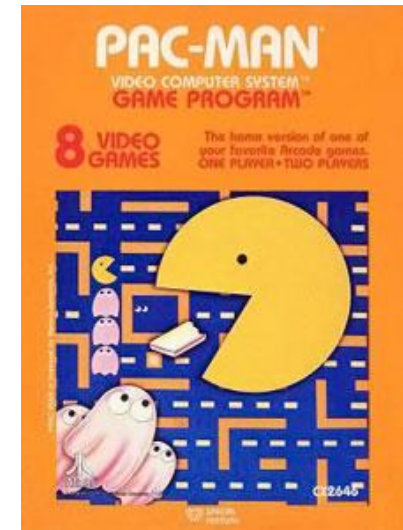
Quantidade de jogos por gênero



Mais vendidos por gênero

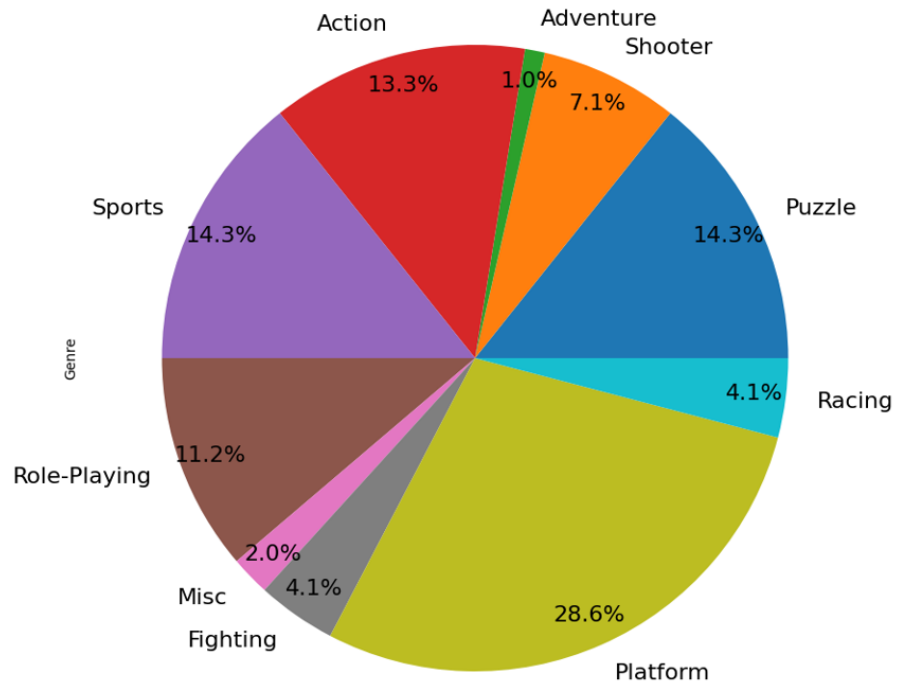
Name	Genre	Year	Publisher	Global_Sales
Pac-Man	Puzzle	1982	Atari	7.81
Pitfall!	Platform	1981	Activision	4.50
Asteroids	Shooter	1980	Atari	4.31
Frogger	Action	1981	Parker Bros.	2.20
Pole Position	Racing	1982	Atari	1.18
Kaboom!	Misc	1980	Activision	1.15
Boxing	Fighting	1980	Activision	0.77
The Activision Decathlon	Sports	1982	Activision	0.55
Phoenix	Simulation	1981	Atari	0.45
Pengo	Adventure	1983	Atari	0.40

Jogo mais vendido



Nintendo Entertainment System

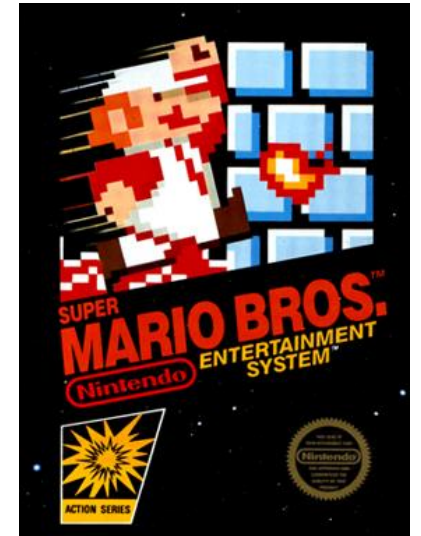
Quantidade de jogos por gênero



Mais vendidos por gênero

Name	Genre	Year	Publisher	Global_Sales
Super Mario Bros.	Platform	1985	Nintendo	40.24
Duck Hunt	Shooter	1984	Nintendo	28.31
The Legend of Zelda	Action	1986	Nintendo	6.51
Tetris	Puzzle	1988	Nintendo	5.58
Zelda II: The Adventure of Link	Adventure	1987	Nintendo	4.38
Excitebike	Racing	1984	Nintendo	4.16
Golf	Sports	1984	Nintendo	4.01
Dragon Warrior III	Role-Playing	1988	Enix Corporation	3.87
Mike Tyson's Punch-Out!!	Fighting	1987	Nintendo	3.02
Mahjong	Misc	1983	Nintendo	2.14

Jogo mais vendido



3ª GERAÇÃO

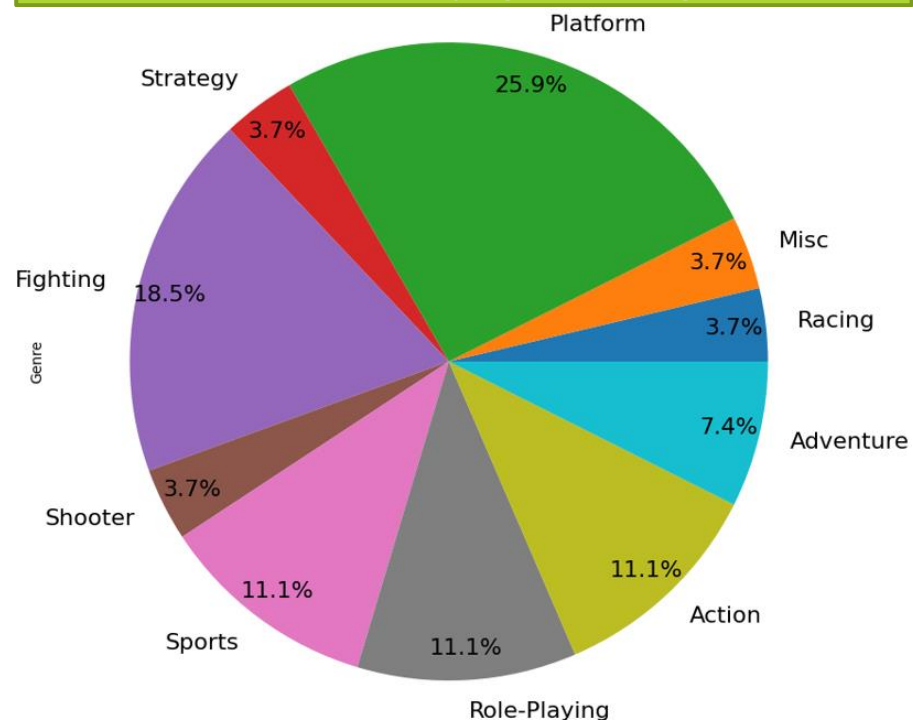
1985

1986



Mega Drive

Quantidade de jogos por gênero



Mais vendidos por gênero

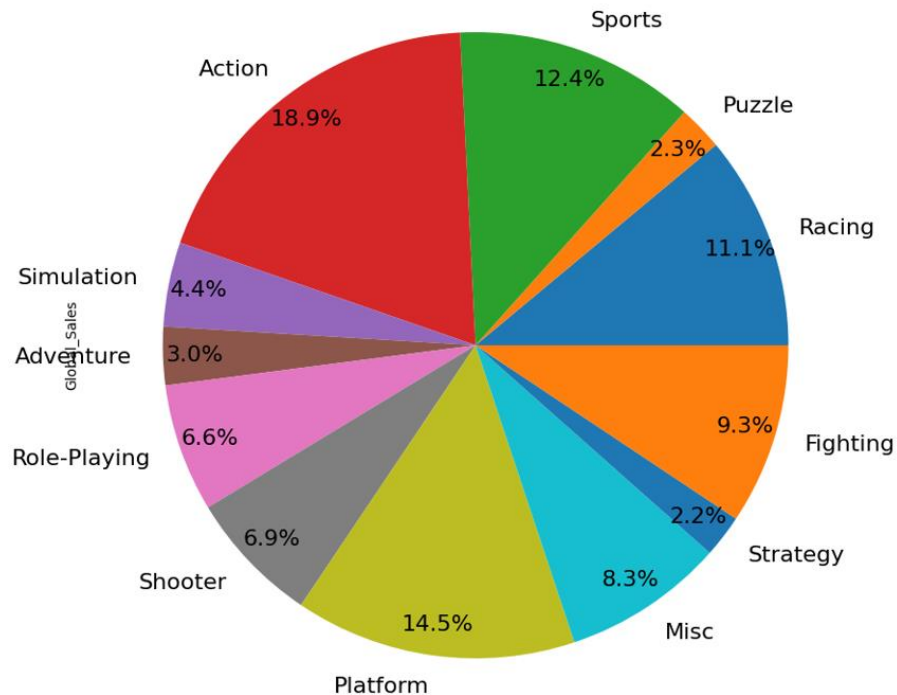
Name	Genre	Year	Publisher	Global_Sales
Sonic the Hedgehog 2	Platform	1992	Sega	6.03
Mortal Kombat	Fighting	1992	Arena Entertainment	2.67
Streets of Rage	Action	1990	Sega	2.60
NBA Jam	Sports	1992	Arena Entertainment	2.05
Virtua Racing	Racing	1994	Sega	0.26
Shining Force II	Strategy	1993	Sega	0.19
Lunar 2: Eternal Blue(sales, but wrong system)	Role-Playing	1994	Game Arts	0.14
Gunstar Heroes	Shooter	1992	Sega	0.13
Ecco the Dolphin	Adventure	1992	Sega	0.12
Puzzle & Action: Tant-R	Misc	1994	Sega	0.03

Jogo mais vendido



Game Boy

Porcentagem de vendas por gênero



Mais vendidos por gênero

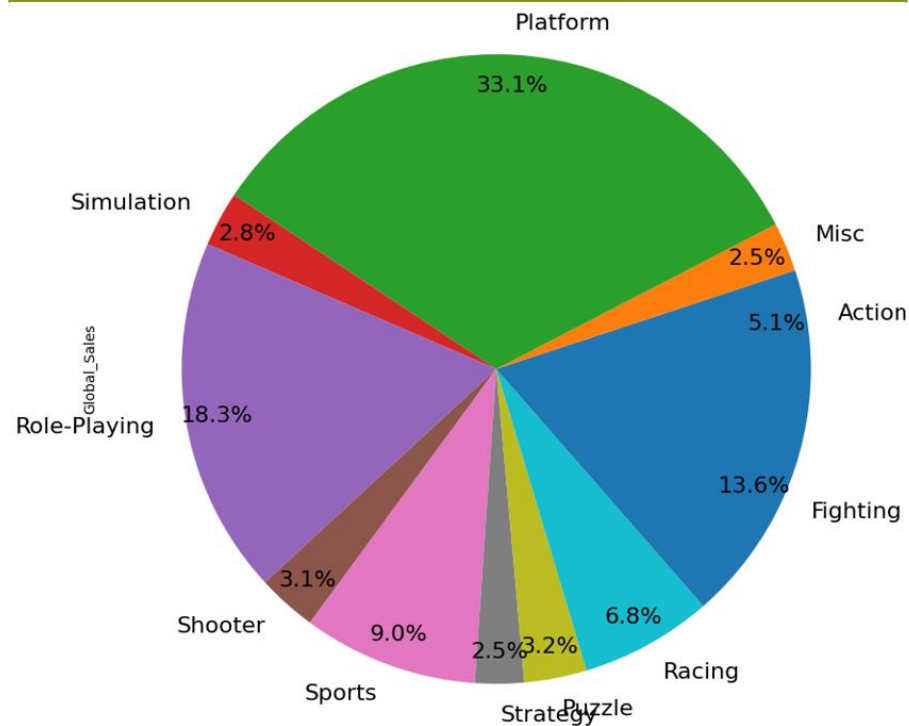
Name	Genre	Year	Publisher	Global_Sales
Pokemon Red/Pokemon Blue	Role-Playing	1996	Nintendo	31.37
Tetris	Puzzle	1989	Nintendo	30.26
Super Mario Land	Platform	1989	Nintendo	18.14
Super Mario Land 2: 6 Golden Coins	Adventure	1992	Nintendo	11.18
Pokemon Pinball	Misc	1999	Nintendo	5.31
The Legend of Zelda: Link's Awakening	Action	1992	Nintendo	3.83
Pokémon Trading Card Game	Strategy	1998	Nintendo	3.70
F-1 Race	Racing	1990	Nintendo	3.41
Golf	Sports	1989	Nintendo	2.12
Tamagotchi	Simulation	1996	Namco Bandai Games	1.45

Jogo mais vendido



Super Nintendo

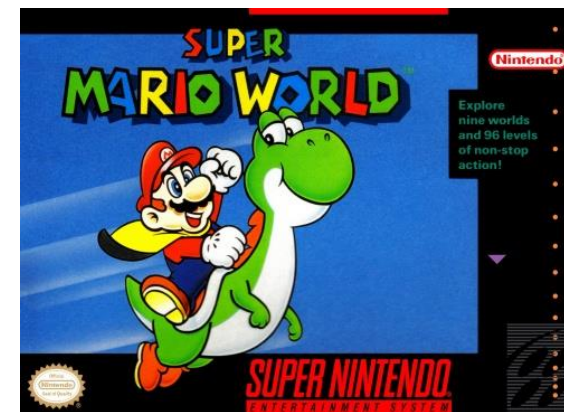
Porcentagem de vendas por gênero



Mais vendidos por gênero

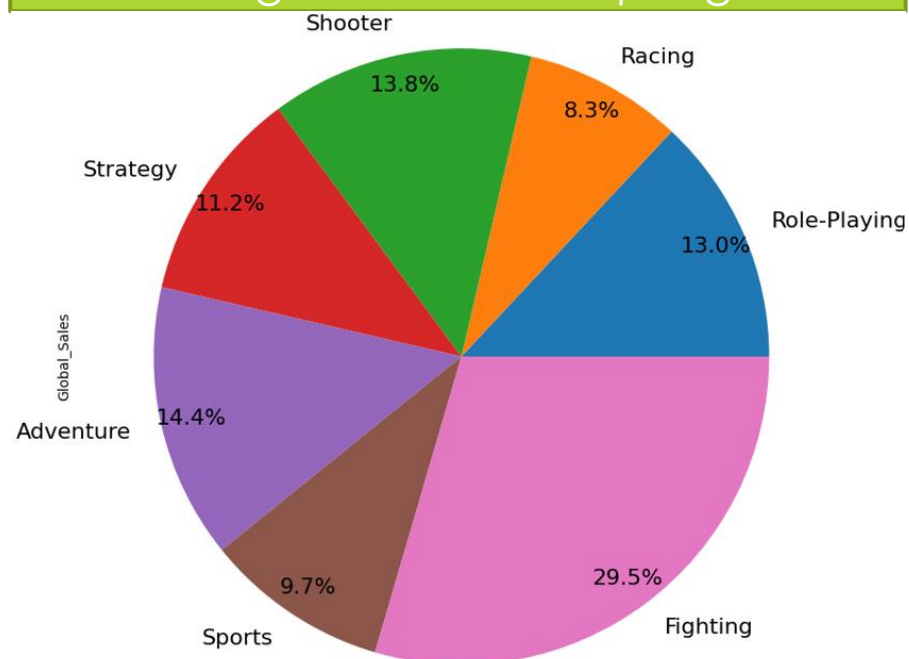
Name	Genre	Year	Publisher	Global_Sales
Super Mario World	Platform	1990	Nintendo	20.61
Super Mario Kart	Racing	1992	Nintendo	8.76
Street Fighter II: The World Warrior	Fighting	1992	Capcom	6.30
The Legend of Zelda: A Link to the Past	Action	1991	Nintendo	4.61
Final Fantasy III	Role-Playing	1994	SquareSoft	3.42
Star Fox	Shooter	1993	Nintendo	2.99
Mario Paint	Misc	1992	Nintendo	2.75
SimCity	Simulation	1991	Nintendo	1.98
Super Puyo Puyo	Puzzle	1993	Banpresto	1.70
NBA Jam	Sports	1994	Acclaim Entertainment	1.39

Jogo mais vendido



Saturn

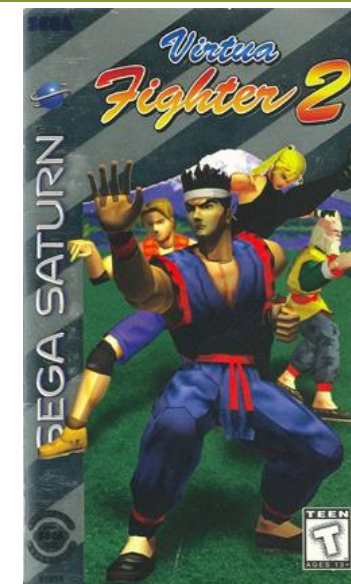
Porcentagem de vendas por gênero



Mais vendidos por gênero

Name	Genre	Year	Publisher	Global_Sales
Virtua Fighter 2	Fighting	1995	Sega	1.93
Sega Rally Championship	Racing	1995	Sega	1.16
Virtua Cop	Shooter	1995	Sega	0.62
Puyo Puyo Sun	Puzzle	1997	Compile	0.60
Sakura Wars	Adventure	1996	Sega	0.55
Super Robot Taisen F	Strategy	1997	Banpresto	0.55
J-League Pro Soccer Club wo Tsukurou! 2	Sports	1997	Sega	0.49
NiGHTS into dreams...	Platform	1996	Sega	0.43
Neon Genesis Evangelion 2nd Impression	Role-Playing	1997	Sega	0.42
Mobile Suit Gundam	Action	1995	Namco Bandai Games	0.41

Jogo mais vendido



5ª GERAÇÃO 1995



SATURN

PLAYSTATION

1996



NINTENDO 64

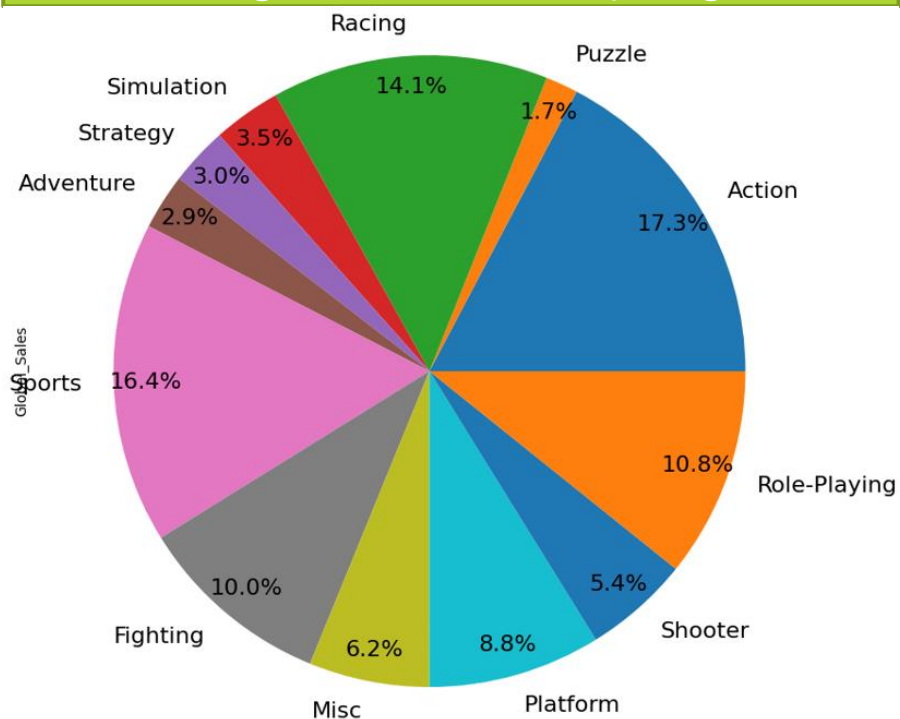
1998



GAMEBOY
COLOR

Playstation

Porcentagem de vendas por gênero



Mais vendidos por gênero

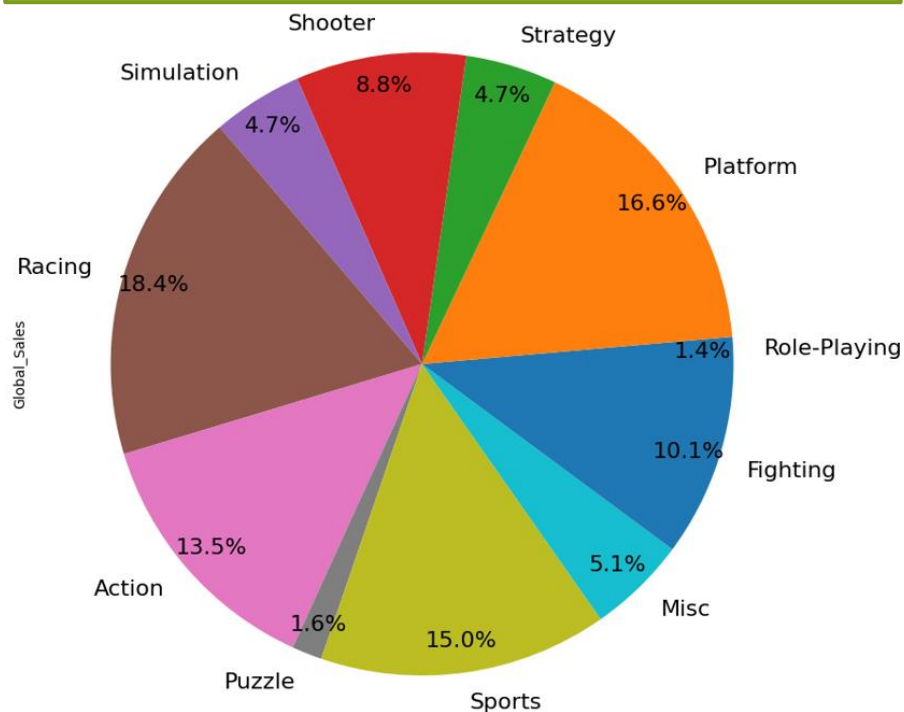
Name	Genre	Year	Publisher
Gran Turismo	Racing	1997	Sony Computer Entertainment
Final Fantasy VII	Role-Playing	1997	Sony Computer Entertainment
Crash Bandicoot 2: Cortex Strikes Back	Platform	1997	Sony Computer Entertainment
Tekken 3	Fighting	1998	Sony Computer Entertainment
Driver	Action	1999	GT Interactive
Tony Hawk's Pro Skater	Sports	1999	Activision
Warzone 2100	Strategy	1999	Eidos Interactive
Namco Museum Vol.3	Misc	1996	Sony Computer Entertainment
Rugrats: Search For Reptar	Adventure	1998	THQ
007: Tomorrow Never Dies	Shooter	1999	Electronic Arts

Jogo mais vendido



Nintendo 64

Porcentagem de vendas por gênero



Mais vendidos por gênero

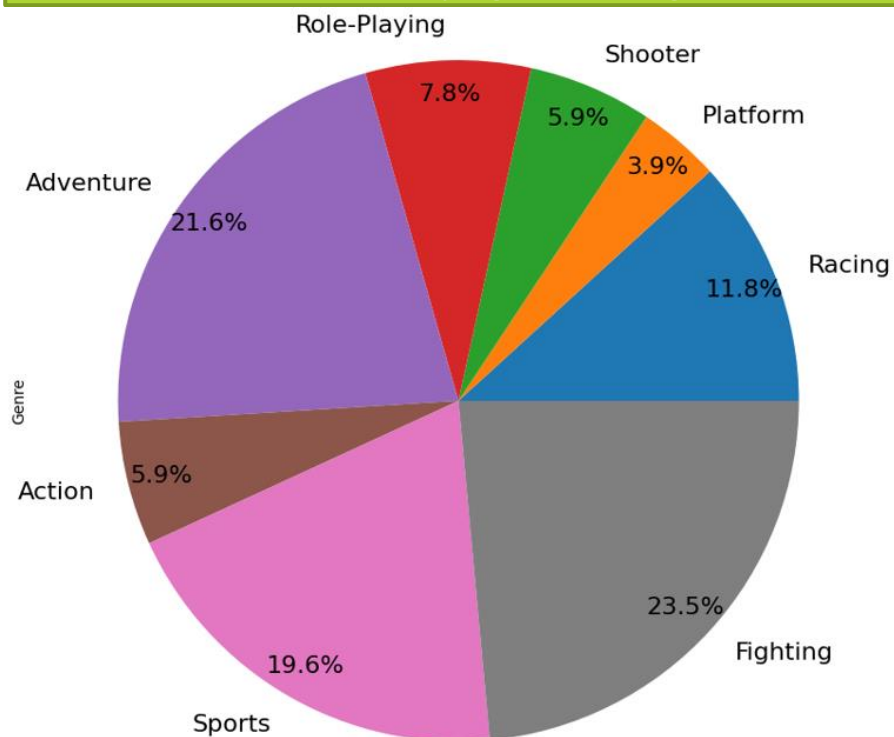
Name	Genre	Year	Publisher	Global_Sales
Super Mario 64	Platform	1996	Nintendo	11.89
Mario Kart 64	Racing	1996	Nintendo	9.87
GoldenEye 007	Shooter	1997	Nintendo	8.09
The Legend of Zelda: Ocarina of Time	Action	1998	Nintendo	7.60
Super Smash Bros.	Fighting	1999	Nintendo	5.55
Pokemon Stadium	Strategy	1999	Nintendo	5.45
Pokemon Snap	Simulation	1999	Nintendo	3.63
Mario Party	Misc	1998	Nintendo	2.70
Mario Tennis	Sports	2000	Nintendo	2.32
Paper Mario	Role-Playing	2000	Nintendo	1.38

Jogo mais vendido



Dreamcast

Quantidade de jogos por gênero



Mais vendidos por gênero

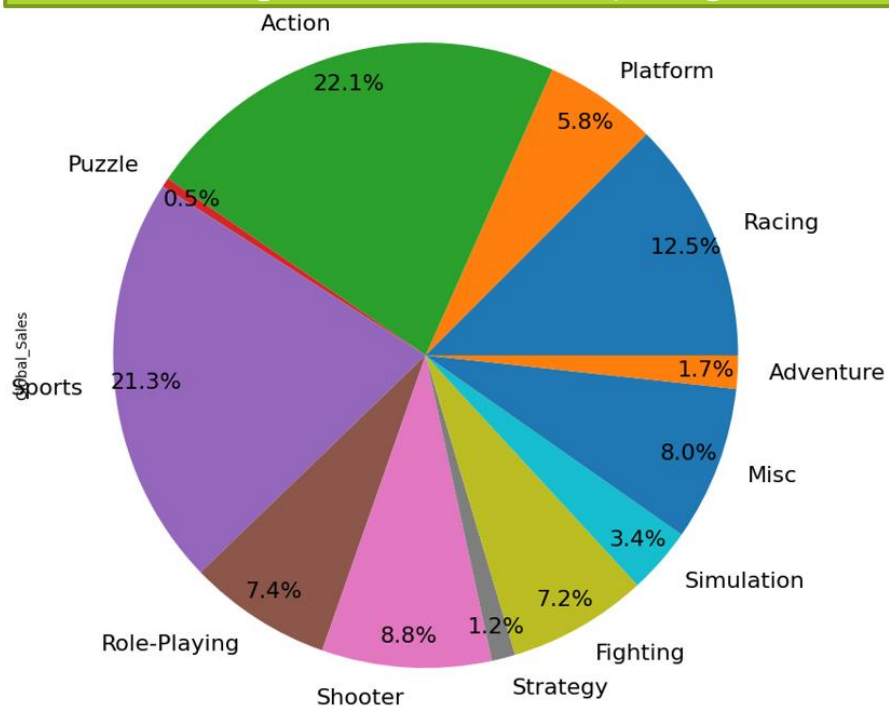
Name	Genre	Year	Publisher	Global_Sales
Sonic Adventure	Platform	1998	Sega	2.42
Crazy Taxi	Racing	2000	Sega	1.81
NFL 2K	Sports	1999	Sega	1.20
Shenmue	Adventure	1999	Sega	1.18
Resident Evil - Code: Veronica	Action	2000	Eidos Interactive	1.14
Seaman	Simulation	1999	Sega	0.52
Virtua Fighter 3tb	Fighting	1998	Sega	0.37
The House of the Dead 2	Shooter	1998	Sega	0.26
Phantasy Star Online	Role-Playing	2000	Sega	0.20

Jogo mais vendido



Playstation 2

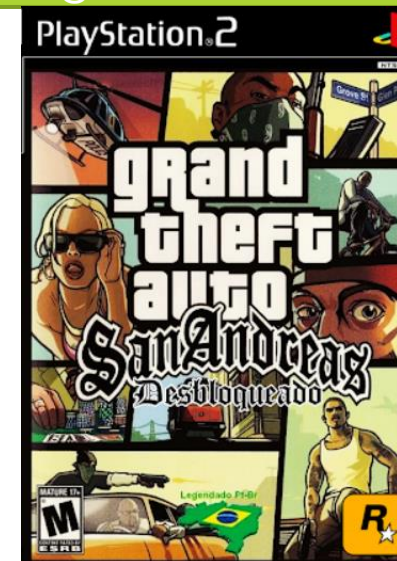
Porcentagem de vendas por gênero



Mais vendidos por gênero

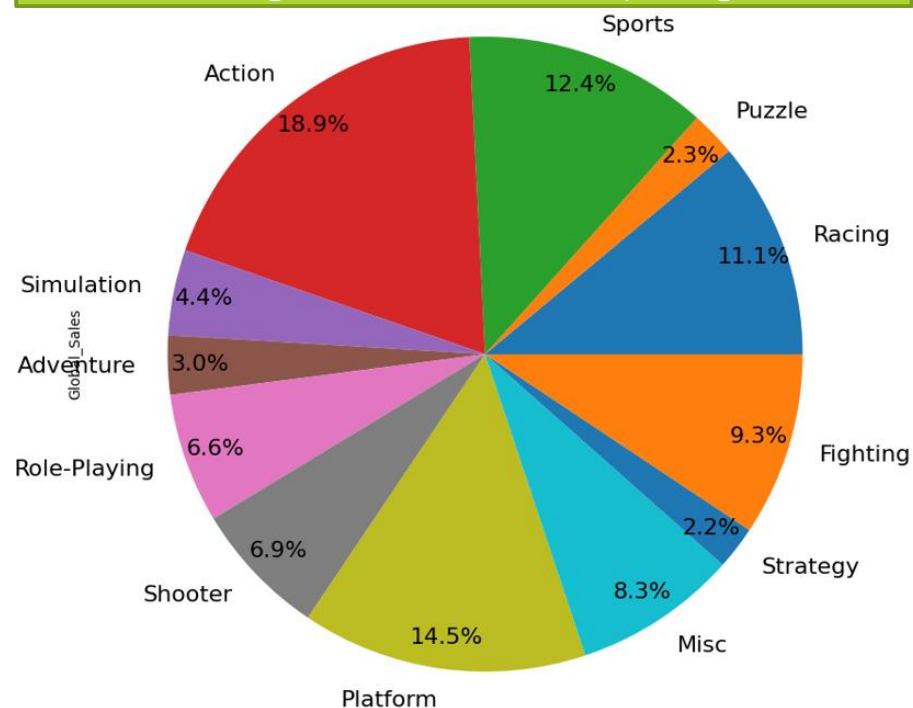
Name	Genre	Year	Publisher	Global_Sales
Grand Theft Auto: San Andreas	Action	2004	Take-Two Interactive	20.81
Gran Turismo 3: A-Spec	Racing	2001	Sony Computer Entertainment	14.98
Final Fantasy X	Role-Playing	2001	Sony Computer Entertainment	8.05
Medal of Honor: Frontline	Shooter	2002	Electronic Arts	6.83
Crash Bandicoot: The Wrath of Cortex	Platform	2001	Universal Interactive	5.42
Guitar Hero II	Misc	2006	RedOctane	5.12
Madden NFL 06	Sports	2005	Electronic Arts	4.91
Tekken Tag Tournament	Fighting	2000	Namco Bandai Games	4.05
Ace Combat 04: Shattered Skies	Simulation	2001	Sony Computer Entertainment Europe	3.17
Onimusha 2: Samurai's Destiny	Adventure	2002	Capcom	2.25

Jogo mais vendido



Game Cube

Porcentagem de vendas por gênero



Mais vendidos por gênero

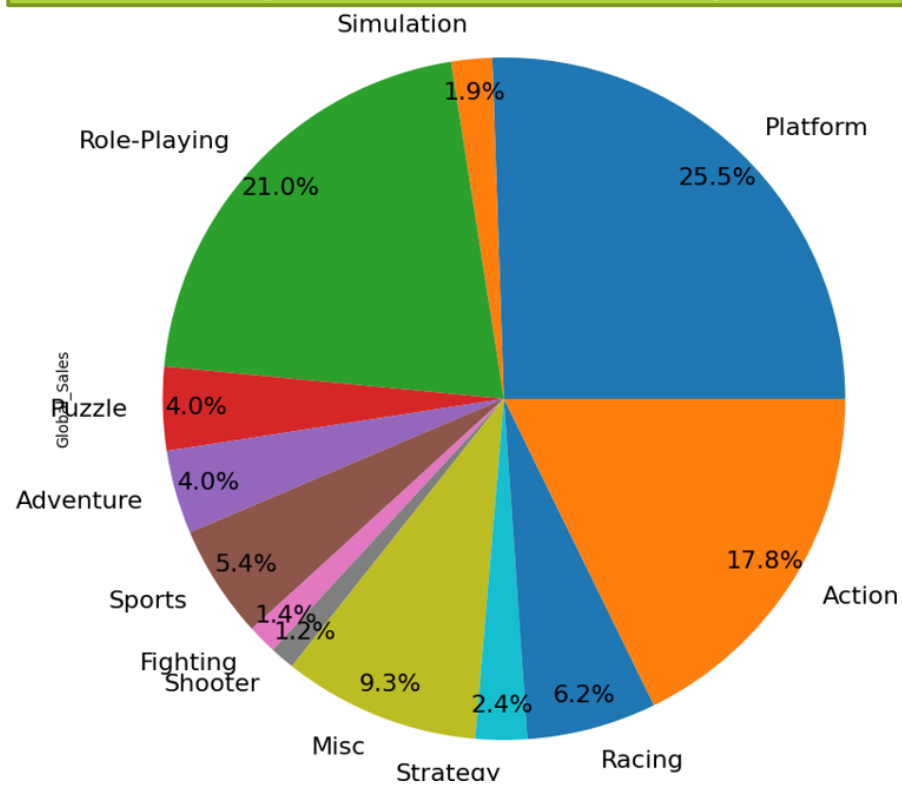
Name	Genre	Year	Publisher	Global_Sales
Super Smash Bros. Melee	Fighting	2001	Nintendo	7.07
Mario Kart: Double Dash!!	Racing	2003	Nintendo	6.95
Super Mario Sunshine	Platform	2002	Nintendo	6.31
The Legend of Zelda: The Wind Waker	Action	2002	Nintendo	4.60
Animal Crossing	Simulation	2001	Nintendo	3.15
Metroid Prime	Shooter	2002	Nintendo	2.82
Pokémon Colosseum	Role-Playing	2003	Nintendo	2.54
Mario Party 4	Misc	2002	Nintendo	2.47
Star Fox Adventures	Adventure	2002	Nintendo	1.87
Pikmin	Strategy	2001	Nintendo	1.63

Jogo mais vendido



Game Boy Advance

Porcentagem de vendas por gênero



Mais vendidos por gênero

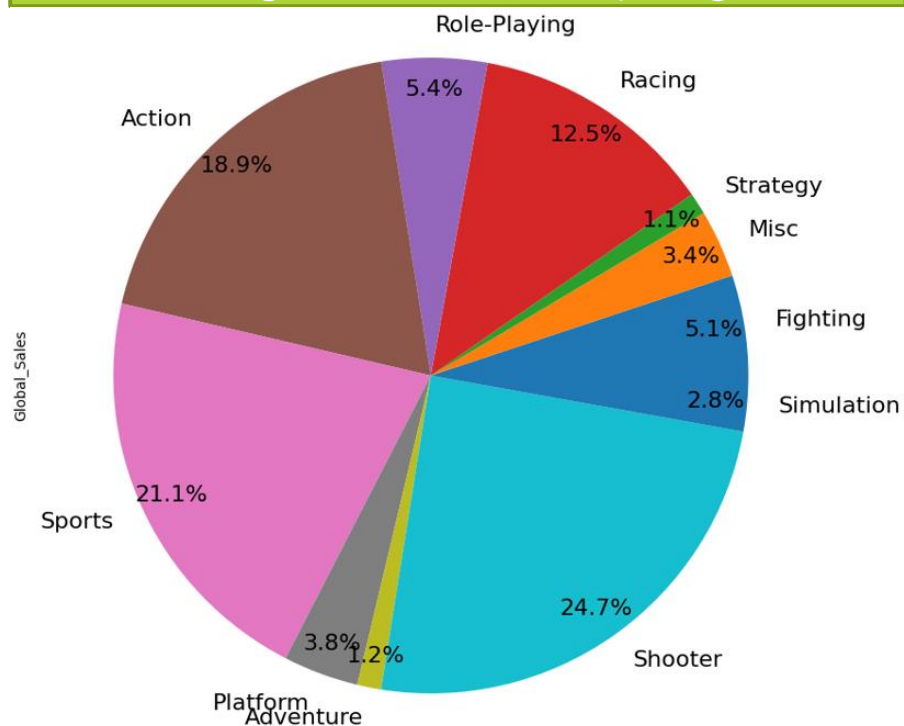
Name	Genre	Year	Publisher	Global_Sales
Pokemon Ruby/Pokemon Sapphire	Role-Playing	2002	Nintendo	15.85
Super Mario Advance	Platform	2001	Nintendo	5.49
Mario Kart: Super Circuit	Racing	2001	Nintendo	5.47
Namco Museum	Misc	2001	Namco Bandai Games	4.24
Pac-Man Collection	Puzzle	2001	Atari	2.94
Finding Nemo	Action	2003	THQ	2.82
Yu-Gi-Oh! The Eternal Duelist Soul	Strategy	2001	Konami Digital Entertainment	2.07
Monsters, Inc.	Adventure	2001	THQ	1.67
The Sims: Bustin' Out	Simulation	2003	Electronic Arts	1.33
Tony Hawk's Pro Skater 2	Sports	2001	Activision	1.18

Jogo mais vendido



Xbox

Porcentagem de vendas por gênero



Mais vendidos por gênero

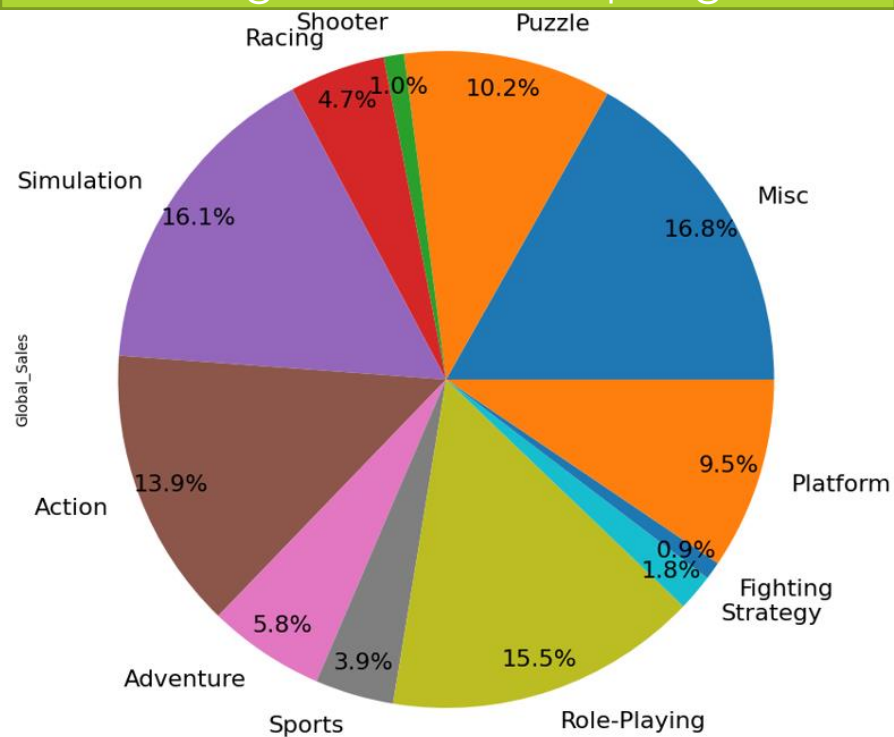
Name	Genre	Year	Publisher	Global_Sales
Halo 2	Shooter	2004	Microsoft Game Studios	8.49
Tom Clancy's Splinter Cell	Action	2002	Ubisoft	3.02
The Elder Scrolls III: Morrowind	Role-Playing	2002	Ubisoft	2.86
Need for Speed Underground 2	Racing	2004	Electronic Arts	2.28
Madden NFL 06	Sports	2005	Electronic Arts	1.86
Dead or Alive 3	Fighting	2001	Microsoft Game Studios	1.77
Crash Bandicoot: The Wrath of Cortex	Platform	2002	Universal Interactive	1.23
Fuzion Frenzy	Misc	2001	Microsoft Game Studios	1.21
MechAssault	Simulation	2002	Microsoft Game Studios	1.13
Full Spectrum Warrior	Strategy	2004	THQ	0.73

Jogo mais vendido



Nintendo DS

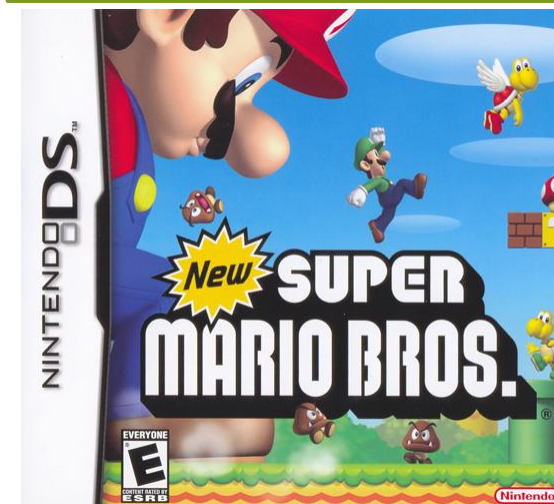
Porcentagem de vendas por gênero



Mais vendidos por gênero

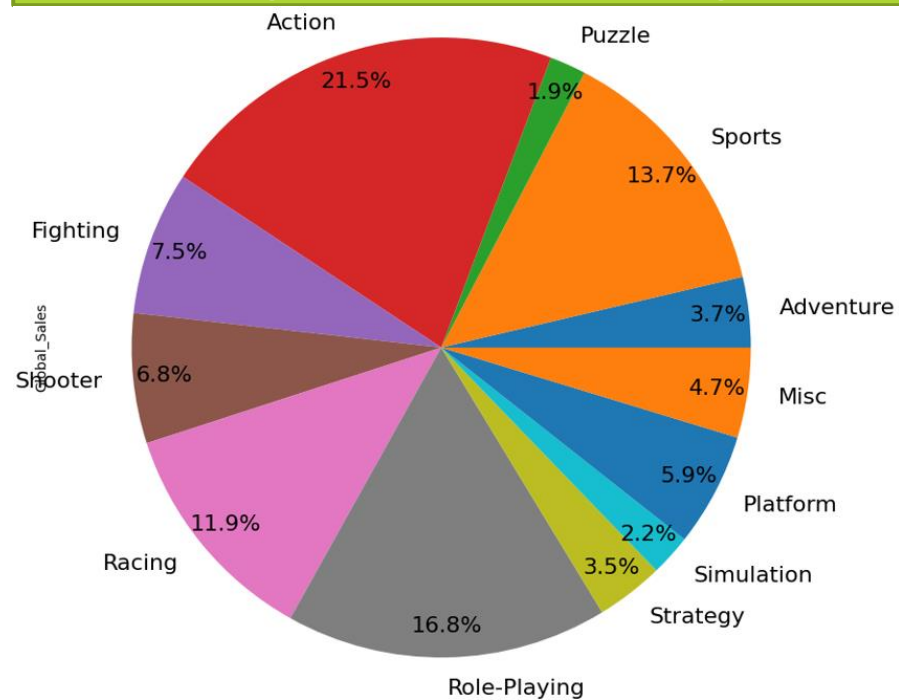
Name	Genre	Year	Publisher	Global_Sales
New Super Mario Bros.	Platform	2006	Nintendo	30.01
Nintendogs	Simulation	2005	Nintendo	24.76
Mario Kart DS	Racing	2005	Nintendo	23.42
Brain Age: Train Your Brain in Minutes a Day	Misc	2005	Nintendo	20.22
Pokemon Diamond/Pokemon Pearl	Role-Playing	2006	Nintendo	18.36
Brain Age 2: More Training in Minutes a Day	Puzzle	2005	Nintendo	15.30
Pokemon HeartGold/Pokemon SoulSilver	Action	2009	Nintendo	11.90
Mario & Sonic at the Olympic Games	Sports	2008	Sega	5.14
Club Penguin: Elite Penguin Force	Adventure	2008	Disney Interactive Studios	3.16
LEGO Battles: Ninjago	Strategy	2011	Warner Bros. Interactive Entertainment	1.55

Jogo mais vendido



PSP

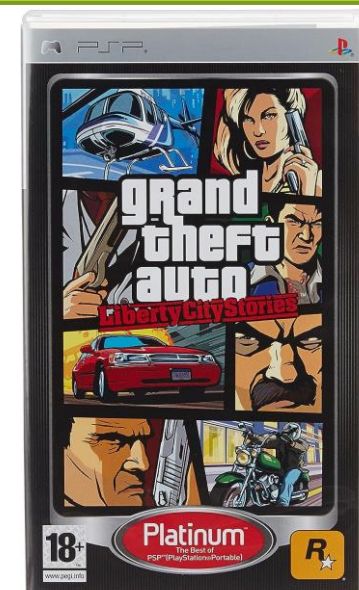
Porcentagem de vendas por gênero



Mais vendidos por gênero

Name	Genre	Year	Publisher	Global_Sales
Grand Theft Auto: Liberty City Stories	Action	2005	Take-Two Interactive	7.72
Monster Hunter Freedom Unite	Role-Playing	2008	Capcom	5.50
Daxter	Platform	2006	Sony Computer Entertainment	4.22
Midnight Club 3: DUB Edition	Racing	2005	Take-Two Interactive	3.66
Medal of Honor Heroes	Shooter	2006	Electronic Arts	2.65
Pac-Man: Adventures in Time	Fighting	2006	Sony Computer Entertainment	2.63
Hot Shots Golf: Open Tee	Sports	2004	Sony Computer Entertainment	1.96
The Sims 2	Simulation	2005	Electronic Arts	1.38
Lumines: Puzzle Fusion	Puzzle	2004	Ubisoft	1.11
Namco Museum Battle Collection	Misc	2005	Sony Computer Entertainment	1.09

Jogo mais vendido



2004
7ª GERAÇÃO



DS

2005



XBOX 360

2006

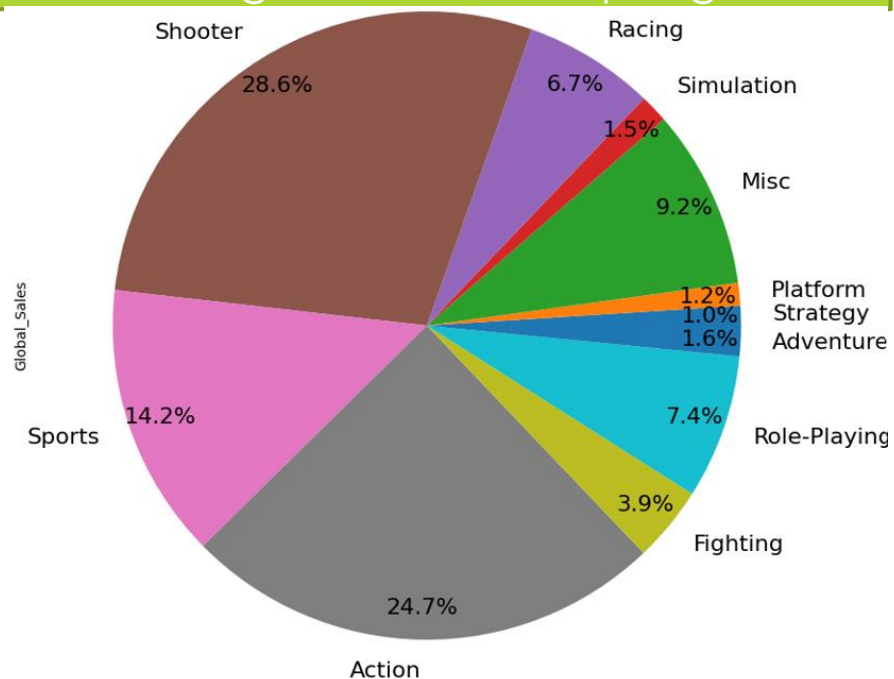


Wii

PLAYSTATION 3

Xbox 360

Porcentagem de vendas por gênero



Mais vendidos por gênero

Name	Genre	Year	Publisher	Global_Sales
Kinect Adventures!	Misc	2010	Microsoft Game Studios	21.82
Grand Theft Auto V	Action	2013	Take-Two Interactive	16.38
Call of Duty: Modern Warfare 3	Shooter	2011	Activision	14.76
The Elder Scrolls V: Skyrim	Role-Playing	2011	Bethesda Softworks	8.84
Kinect Sports	Sports	2010	Microsoft Game Studios	6.24
Assassin's Creed	Adventure	2007	Ubisoft	5.55
Forza Motorsport 3	Racing	2009	Microsoft Game Studios	5.51
Street Fighter IV	Fighting	2009	Capcom	2.95
Halo Wars	Strategy	2009	Microsoft Game Studios	2.63
The Sims 3	Simulation	2010	Electronic Arts	2.33

Jogo mais vendido



2004
7ª GERAÇÃO



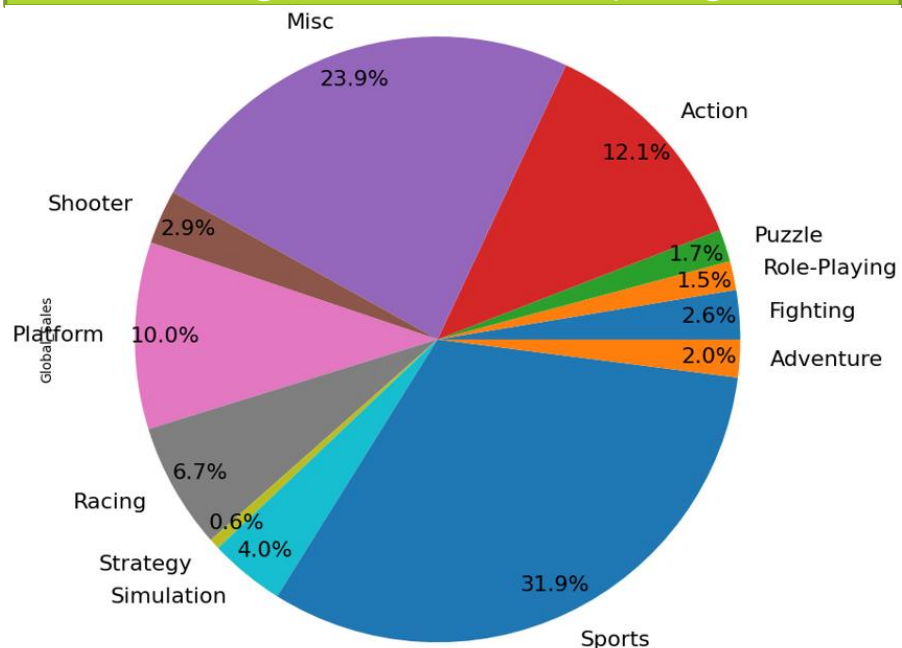
2005



2006

Nintendo Wii

Porcentagem de vendas por gênero



Mais vendidos por gênero

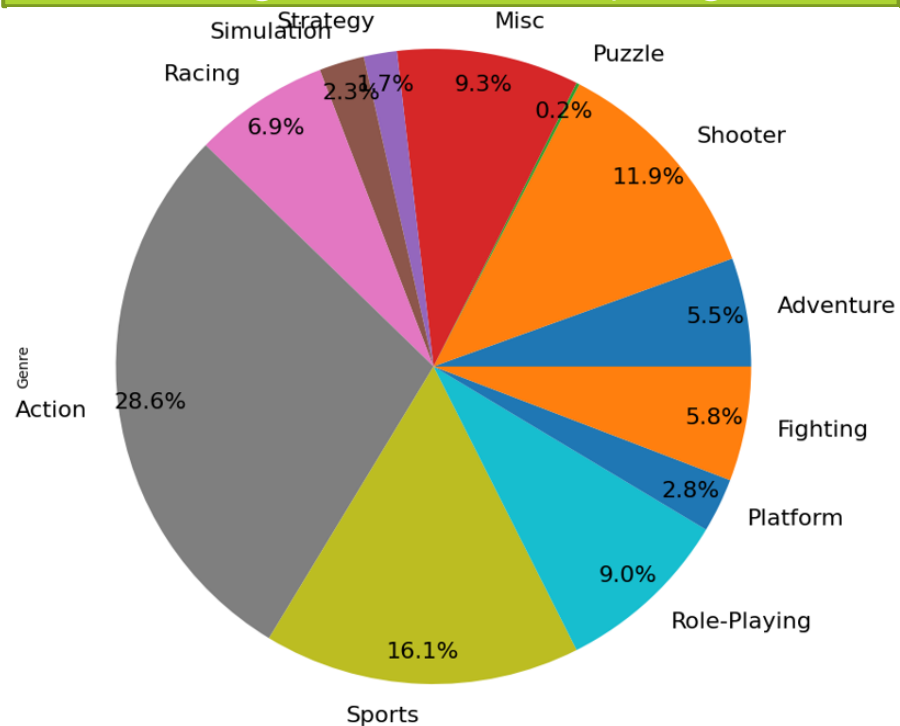
Name	Genre	Year	Publisher	Global_Sales
Wii Sports	Sports	2006	Nintendo	82.74
Mario Kart Wii	Racing	2008	Nintendo	35.82
Wii Play	Misc	2006	Nintendo	29.02
New Super Mario Bros. Wii	Platform	2009	Nintendo	28.62
Super Smash Bros. Brawl	Fighting	2008	Nintendo	13.04
The Legend of Zelda: Twilight Princess	Action	2006	Nintendo	7.31
Link's Crossbow Training	Shooter	2007	Nintendo	5.00
Animal Crossing: City Folk	Simulation	2008	Nintendo	4.68
WarioWare: Smooth Moves	Puzzle	2006	Nintendo	2.92
Monster Hunter Tri	Role-Playing	2009	Nintendo	2.25

Jogo mais vendido



Playstation 3

Porcentagem de vendas por gênero



Mais vendidos por gênero

Name	Genre	Year	Publisher	Global_Sales
Grand Theft Auto V	Action	2013	Take-Two Interactive	21.40
Call of Duty: Black Ops II	Shooter	2012	Activision	14.03
Gran Turismo 5	Racing	2010	Sony Computer Entertainment	10.77
FIFA 14	Sports	2013	Electronic Arts	6.90
The Elder Scrolls V: Skyrim	Role-Playing	2011	Bethesda Softworks	6.56
LittleBigPlanet	Platform	2008	Sony Computer Entertainment	5.92
Minecraft	Misc	2014	Sony Computer Entertainment	5.42
Assassin's Creed	Adventure	2007	Ubisoft	4.83
Street Fighter IV	Fighting	2009	Capcom	4.19
The Sims 3	Simulation	2010	Electronic Arts	2.06

Jogo mais vendido



