

Computer Games 2011

Introduction

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Motivation



“Games are a prosthesis for imagination”
(Will Wright)

Agenda



- Business of Games
- Age ratings
- Game Taxonomy

Gaming Business



AAA Games

- Considered as premium game projects
- Big budget, broad market, high quality
- Large teams, exhaustively tested, etc.

AAA Games - Examples



- Assassins Creed
 - Ubisoft, Ubisoft Montreal
 - Action adventure
 - <http://assassinscreed.us.ubi.com>
- Need for Speed: Hot Pursuit
 - EA, Criterion
 - Racing
 - <http://hotpursuit.needforspeed.com/>

Gaming Business



Indie Games

- Independent video games
- Created without (financial) support of publishers
- Typically relies on digital distribution

Indie Games - Examples





- World of Goo (2D Boy)
 - <http://www.worldofgoo.com/>
 - on site, Steam, Wii Ware, Mac Games Store, ...
- Braid (Number None)
 - <http://www.braid-game.com/>
 - Xbox, Steam, ...
- Flower (thatgamecompany)
 - <http://thatgamecompany.com/games/flower/>

Gaming Business Models



Gaming-Businessmodelle gestern, heute, morgen

	Kunden	Entwicklungskosten	Kosten Kundenerwerb	Umsatz	Trend
	Konsole 200 Mio.	10+ Mio \$	Werbung	100 Mio. \$	➔
	Facebook 600 Mio.	100.000+ \$	1,20 \$	100+ Mio. \$	↘
	Internet 1,6 Mrd.	100.000+ \$	1,40 \$	100+ Mio. \$	↘
	Mobile 4,5 Mrd.	10.000+ \$	< 0,1 \$	10 Mio.+ \$	↘

Quelle: eigene Darstellung nach Bigpoint Zahlen

Gaming Business



Roles in the Games Development Process

- **Game Studio**
 - creates the game
- **Publisher**
 - production & QA
- **Distributor**
 - digital, on media

Game Studio - Examples



- Harmonix
- Naughty Dog
- Bungie
- EA Sports
- People Can Fly

Publisher - Examples



- Electronic Arts
- Capcom
- Konami
- MTV Games

Distributor - Example



- EA Distribution
- Valve
- Sony
- Microsoft
- GOG

Distribution Media



Digital distribution

- Typically means “online” distribution

Digital media based distribution

- Blue-Ray, DVD, UMD, cartridge, etc.

Hybrid methods

- DVD with online registration
- Codes, cards, etc.

Distribution - Steam



- Created & maintained by Valve
- Supports indie games to AAA
- Includes community features
- Manages DRM (one online client)



Distribution - Xbox Marketplace



- Focus on indie, arcade and classic games
- Supports on demand downloads
- Based on virtual money (MS Points)
- Includes community features
- Manages DRM (one Xbox)



Distribution - PSN



- Focus on “smaller” games
 - indie, arcade, minis, PSP, etc.
- Supports on demand downloads
- Includes community features
- Manages DRM (one online, 5 installations)



Distribution - GOG



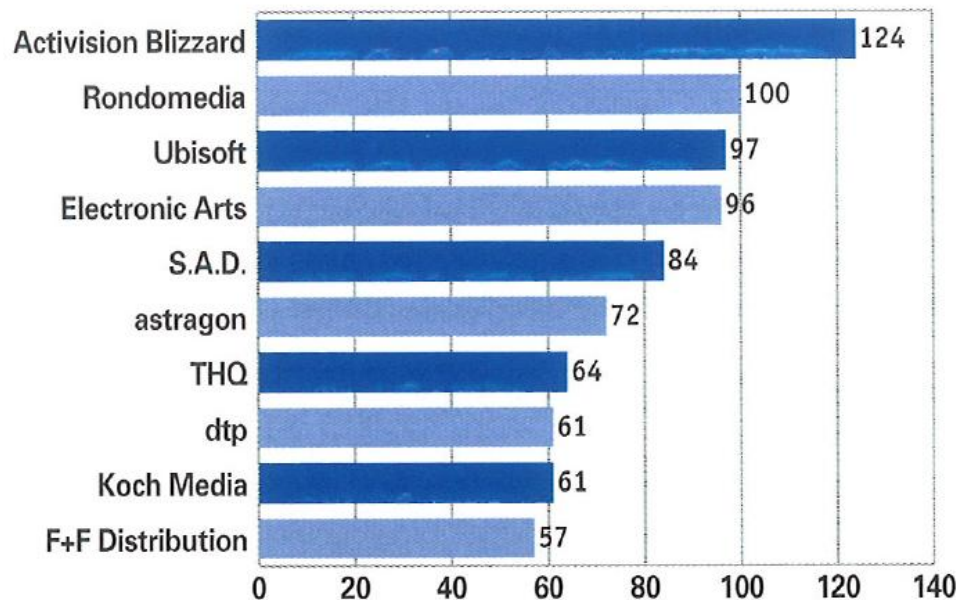
- Provides “old” games
- Working digital copies
- DRM free
- No community features

gog.com

Game Business: Numbers 2010 (DE)



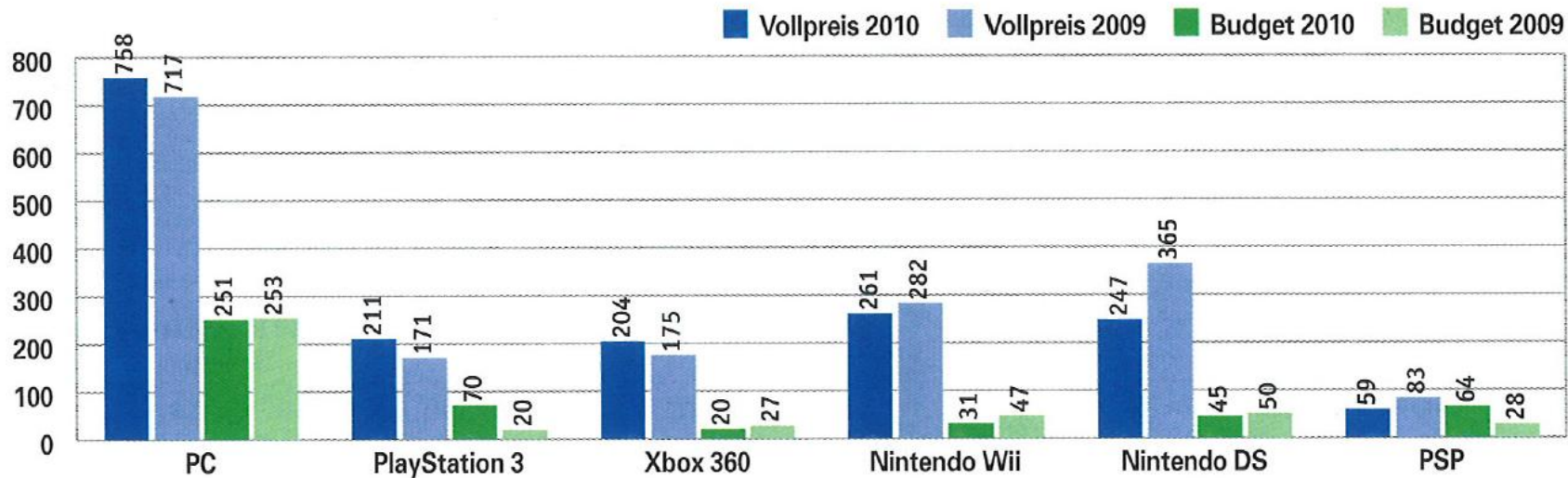
Die aktivsten Publisher (Vollpreistitel 2010)



Game Business: Numbers 2010 (DE)



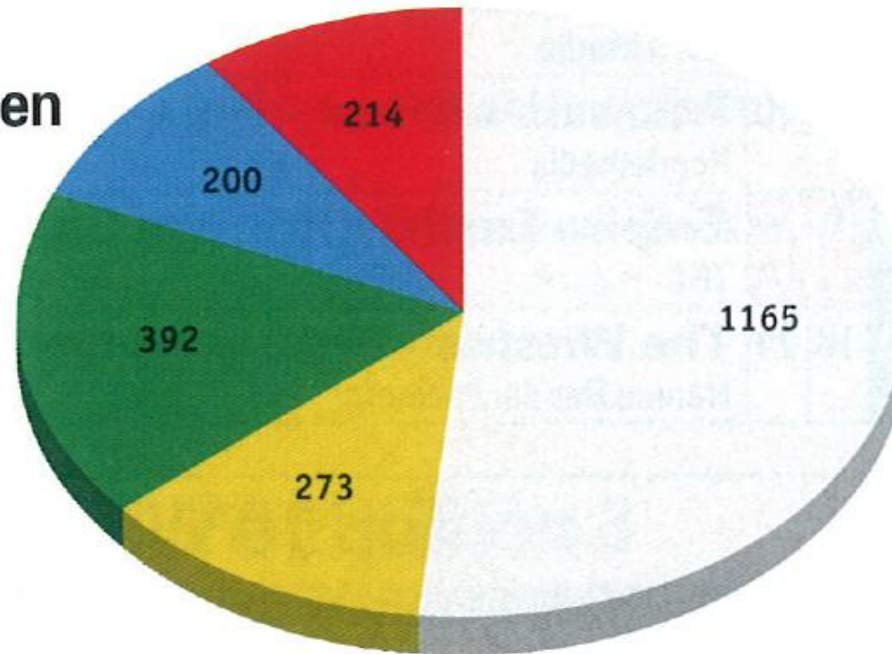
Vollpreis- und Budgetreleases im Vorjahresvergleich



Game Business: Numbers 2010 (DE)



Nach
USK-Freigaben

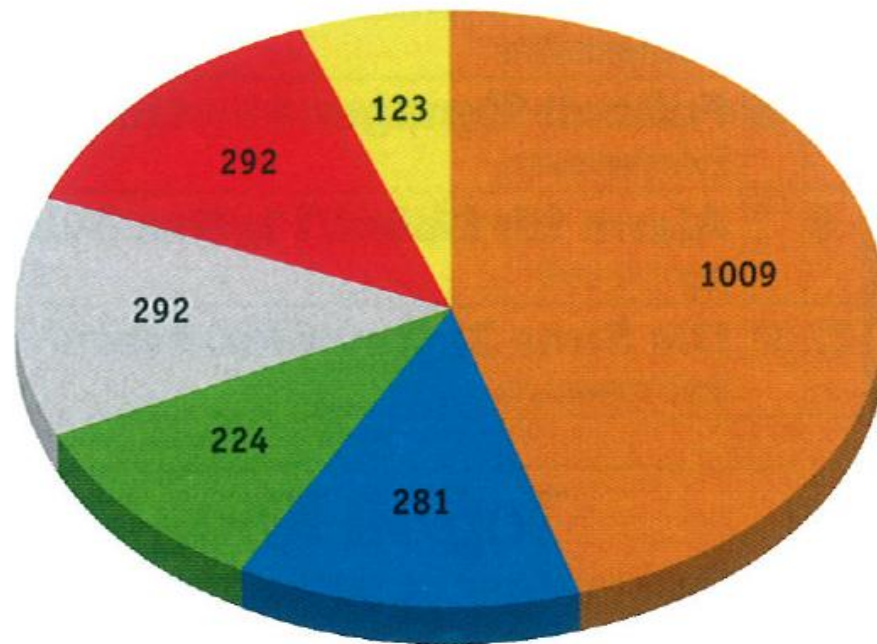


Game Business: Numbers 2010 (DE)



Nach Plattformen

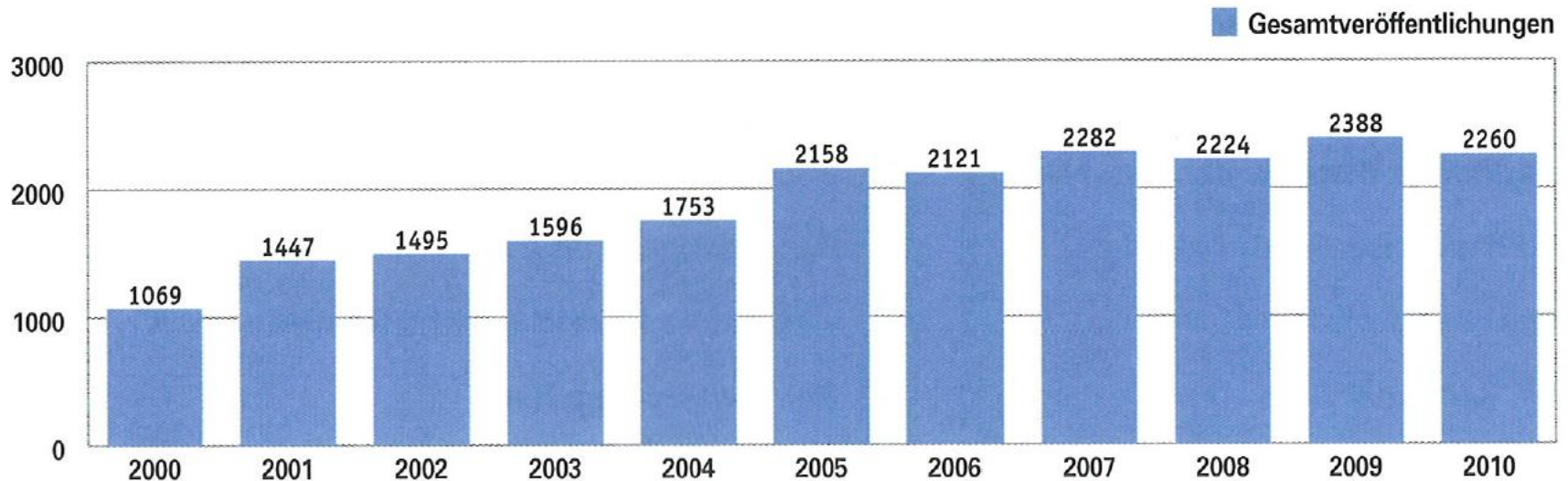
- PC
- PlayStation 3
- Xbox 360
- Nintendo Wii
- Nintendo DS
- PSP



Game Business: Numbers 2010 (DE)



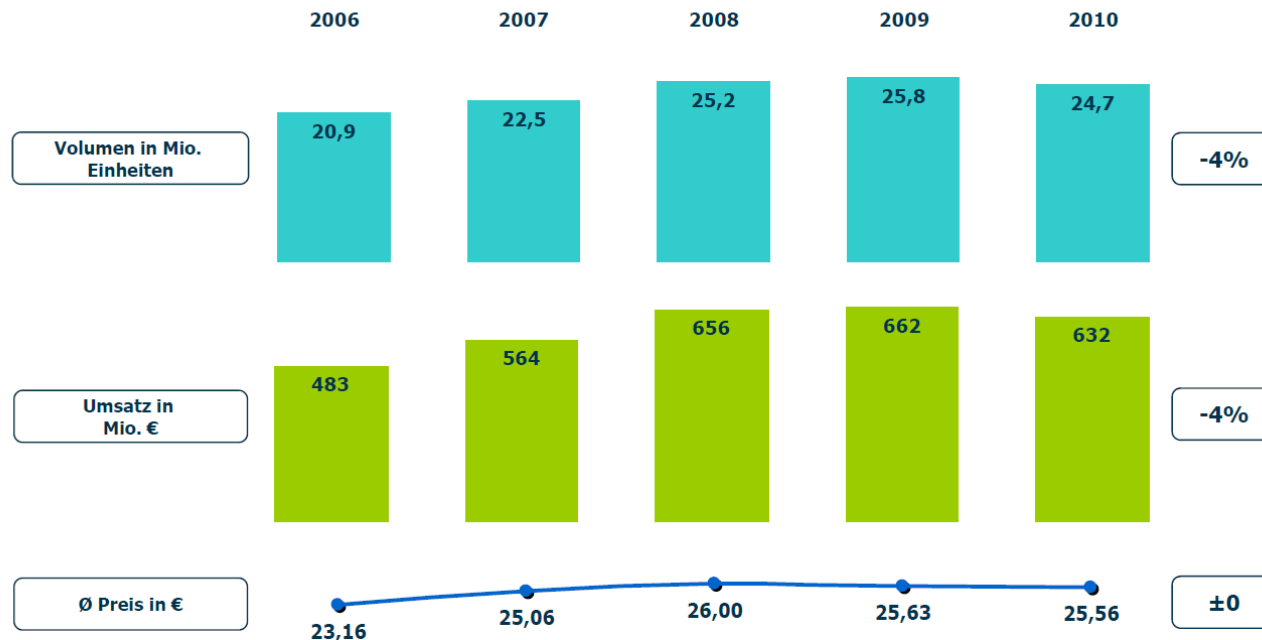
Gesamtzahl Releases 2000–2010



Game Business: Numbers 2010 (DE)



Spielesoftware: Marktentwicklung



PC Games + Videogames + Download Games
Januar-Juni 2010

© 2010 BIU e.V. www.biu-online.de

Quelle: GfK Panel Services Deutschland

Game Business: Numbers 2010 (DE)



BIU Marktentwicklung nach Plattformen

		2009	2010	10 vs 09
GAMES TOTAL	Volumen in Mio. Einheiten	25,8	24,7	-4%
	Umsatz in Mio. €	662	632	-4%
	Ø Preis in €	25,63	25,56	0%
PC	Volumen in Mio. Einheiten	12,2	11,5	-6%
	Umsatz in Mio. €	202	197	-2%
	Ø Preis in €	16,60	17,20	4%
Konsole	Volumen in Mio. Einheiten	8,6	9,2	7%
	Umsatz in Mio. €	323	334	3%
	Ø Preis in €	37,66	36,39	-3%
Handheld	Volumen in Mio. Einheiten	5,1	4,1	-19%
	Umsatz in Mio. €	136	102	-25%
	Ø Preis in €	26,92	24,71	-8%

PC Games + Videogames + Download Games
Januar-Juni 2010

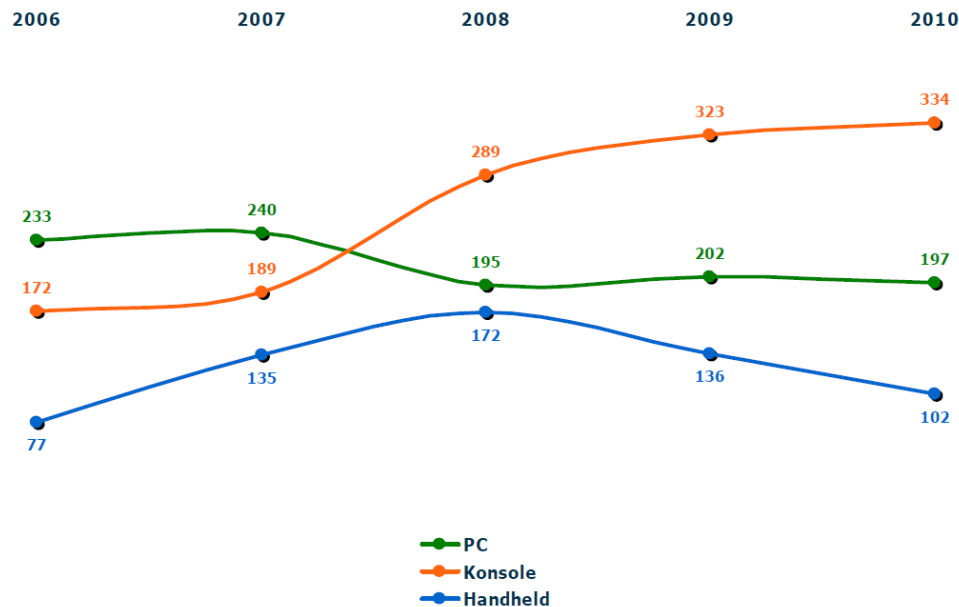
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Quelle: GfK Panel Services Deutschland

Game Business: Numbers 2010 (DE)



BIU  Marktentwicklung im Jahresvergleich



PC Games + Videogames + Download Games, in Mio €
Januar-Juni 2010

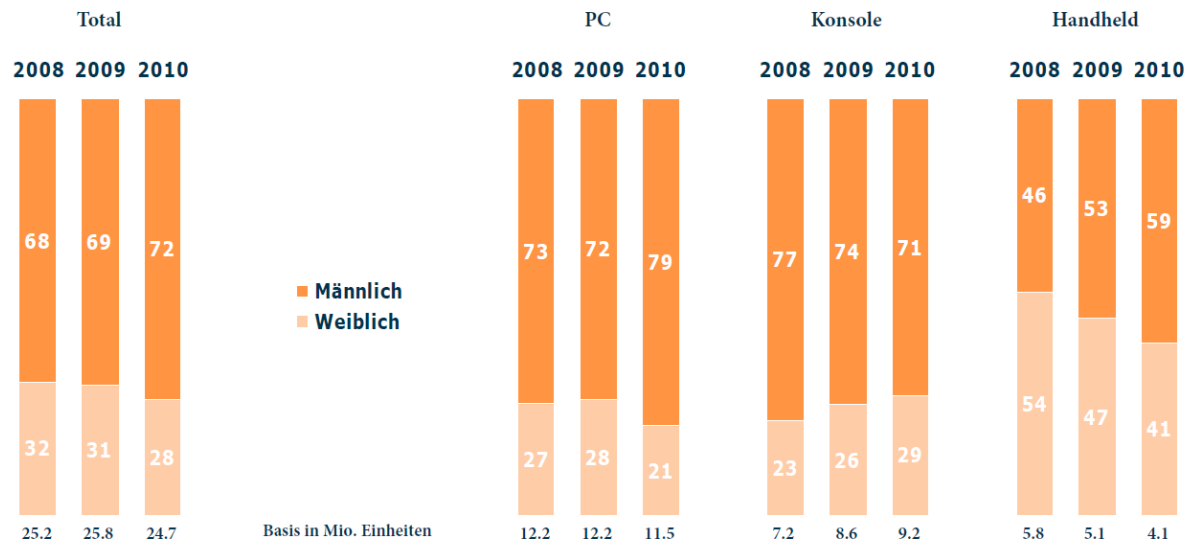
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Quelle: GfK Panel Services Deutschland

Game Business: Numbers 2010 (DE)



Anteil männlicher Spieler nimmt zu



PC Games + Videogames + Download Games, Angaben in %
Januar bis Juni

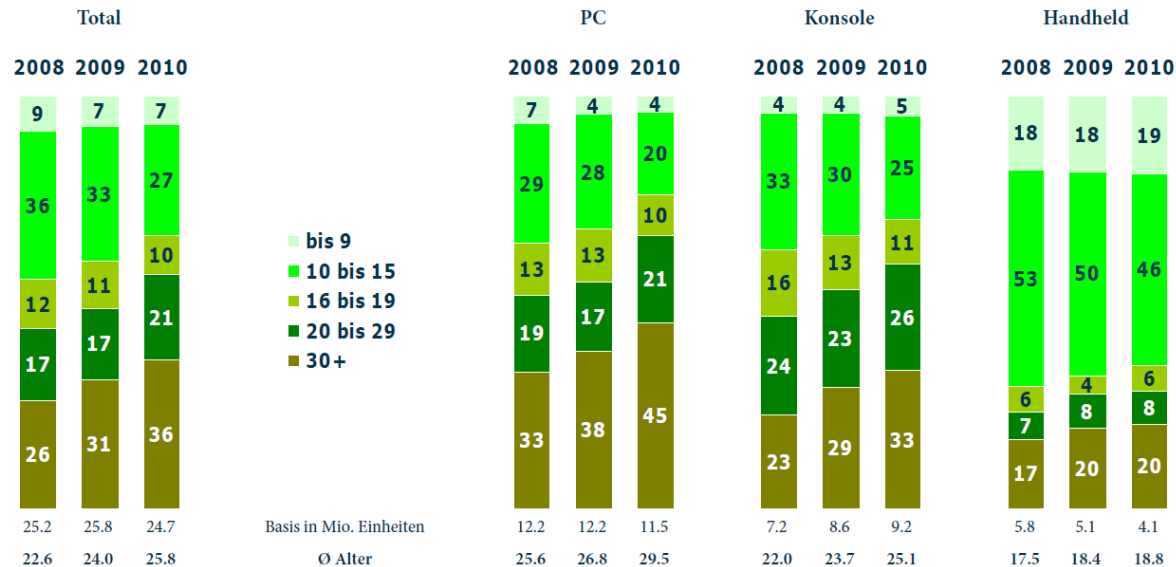
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Quelle: GfK Panel Services Deutschland

Game Business: Numbers 2010 (DE)



Altersdurchschnitt steigt auf 25,8 Jahre



PC Games + Videogames + Download Games, Angaben in %
Januar bis Juni

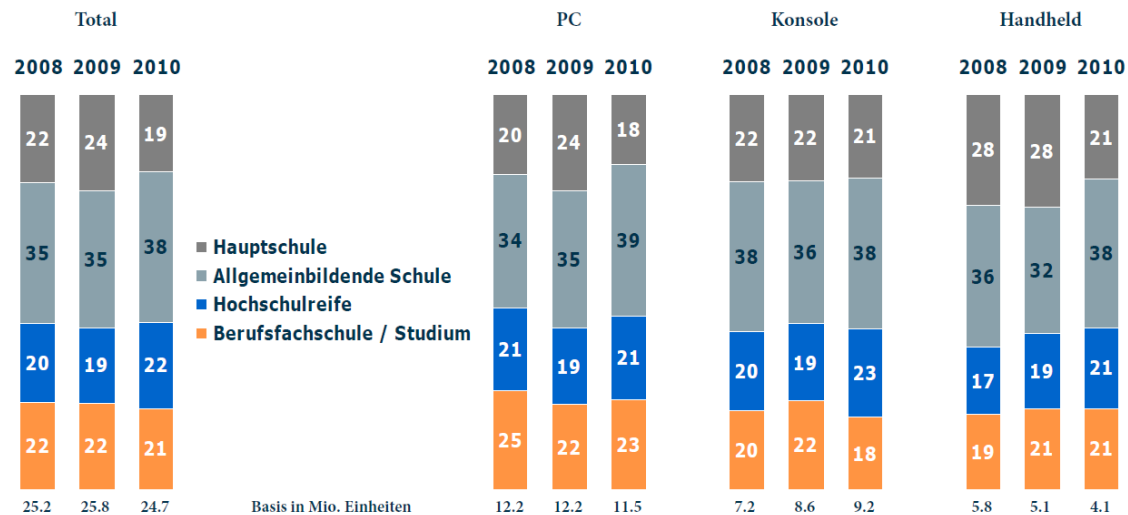
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Quelle: GfK Panel Services Deutschland

Game Business: Numbers 2010 (DE)



Bildungsniveau bleibt konstant hoch



PC Games + Videogames + Download Games, Angaben in %
Januar bis Juni

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Quelle: GfK Panel Services Deutschland

Game Business: U.S. & Canada



The Gamer

34YRS

The average age of a gamer¹

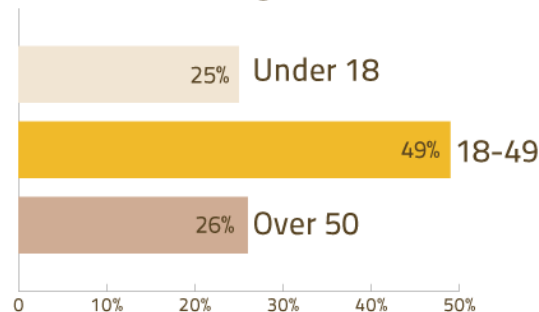
39YRS

The average age of most frequent game purchaser²

12YRS

Average number of years adult gamers have been playing computer/video games¹

2010 Gamer Ages³



67% of US households play video games¹

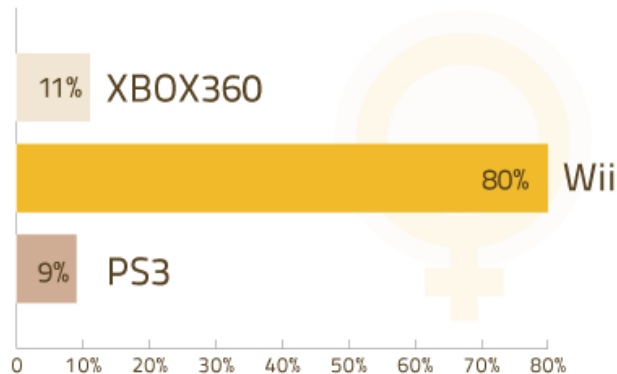
Game Business: U.S. & Canada



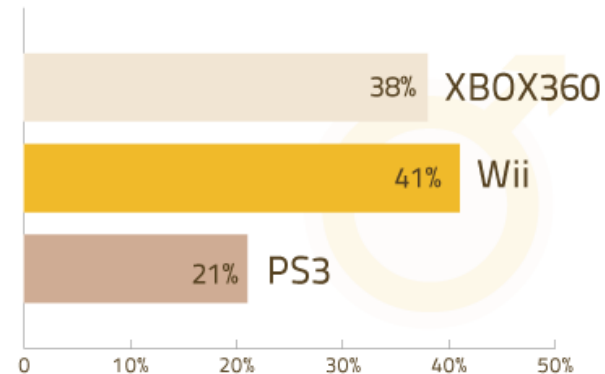
The 2010 average gamer spends 8 hours a week playing video games⁴



2010 Primary Console **Female** Players⁵



2008 Primary Console **Male** Players⁶



Game Business: U.S. & Canada



40% of all gamers
are female¹

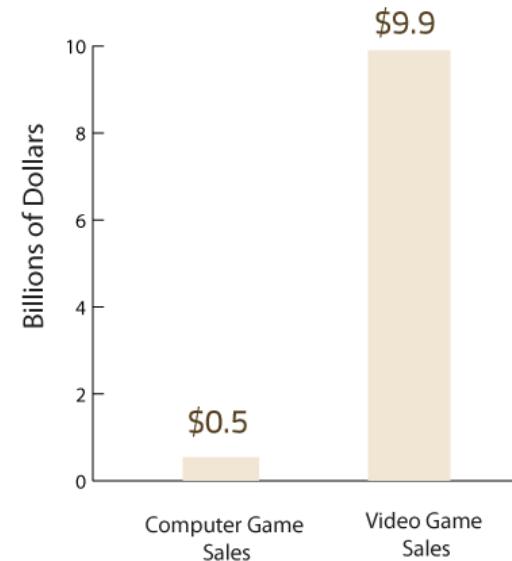
Game Business: U.S. & Canada



The Industry

According to data compiled by the NPD Group, a global market research company, and released by the Entertainment Software Association, the computer and video game industry sold 273 million units in 2009 leading to an astounding³

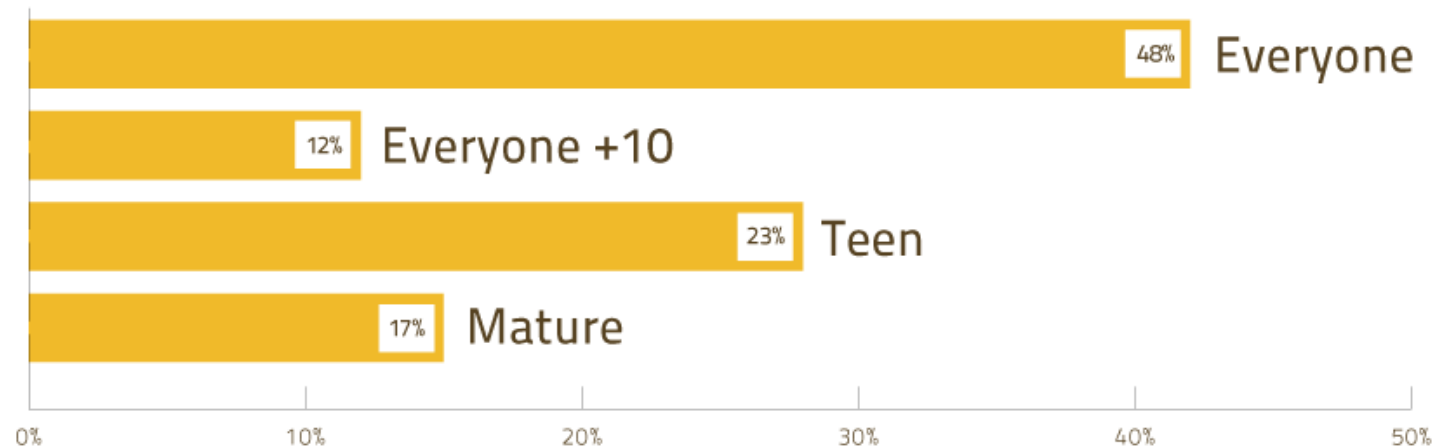
\$10.5
billion in revenue



Game Business: U.S. & Canada



2009 Computer and Video Game Sales By ESRB Rating³



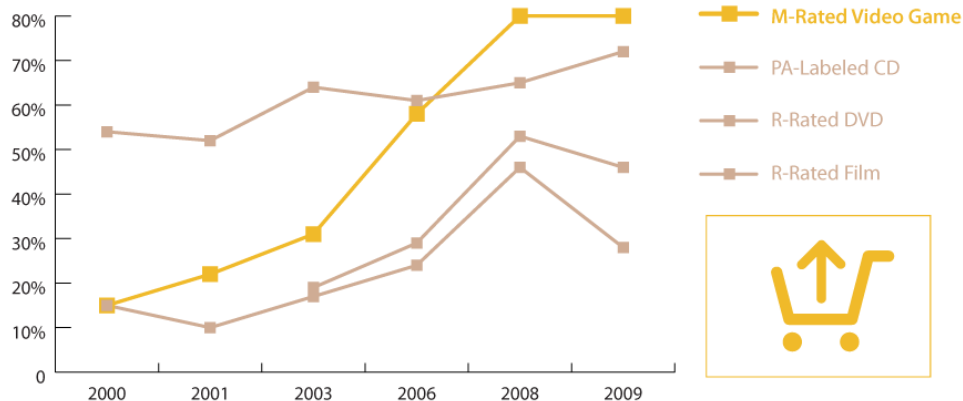
Game Business: U.S. & Canada



FTC Mystery Shops

The FTC also periodically conducts nationwide undercover shops of movie theaters and movie, music, and video game retailers. Their most recent survey found that 80% of individuals under the age of 17 were turned away when trying to purchase or rent M-rated games.⁸

FTC Mystery Shopper Audits: 2000 - 2009⁸



Source: Federal Trade Commission Mystery Shopper Audits 2000-2009

Source: Federal Trade Commission Report to Congress, "Marketing Violent Entertainment to Children," December 2009 (press release).

Business Model: Bigpoint



- Online Browser Games
 - Bigpoint.com biggest German gaming portal
 - In the top 3 gaming portals world wide
- Publisher
 - Development (bigpoint.com & selbst), licensing
- Content Provider
 - e.g. Sevengames
- Developer
 - own game studio



Business Model: Bigpoint



- More than 65 browser games
- More than 160 million gamers
- Selling virtual goods
 - Micropayment



Business Model: Bigpoint



Business Model: Bigpoint



Business Model: Bigpoint



FARMERAMA

1. Artikel auswählen 2. Bezahlart 3. Angaben 4. Bestätigen

Spielwährung

50 Tulpgulden	1,99 €	
300 Tulpgulden Spare 16%!	10,00 €	
750 Tulpgulden Spare 16%!	25,00 €	
1.500 Tulpgulden Spare 18%!	49,00 €	
3.300 Tulpgulden Spare 25%!	99,00 €	
50 Tulpgulden Zahlbar per SMS	2,00 €	
50 Tulpgulden Zahlbar per Telefon	3,63 €	

Gesamt:

Weitere Angebote

Spielwährung Premium Starter-Kit Specials

(c) 2011 Bigpoint GmbH | Impressum | AGB | Status & Vorteilspakete | Support | Promocode aktivieren | Tulpgulden tauschen

Business Model: Bigpoint



4,99 € per month

Premium-Vorteile

FARMERAMA bietet Dir ein Vorteilspaket an, das „Premium-Paket“. Alle Premium-Pakete können monatlich abgeschlossen werden. Jeder Spieler kann die Dauer seines Premium-Pakets wählen:

- 6 Monate
- 12 Monate

Premium-Paket

- Gute Kunden – Du bekommst jeden Tag doppelt so viele Aufträge!
- Dickes Auftragsbuch – Speichere statt 10 bis zu 20 Aufträge im Bauernhaus!
- Großer Misthaufen – Dein Misthaufen hat das doppelte Fassungsvermögen!
- Unendlicher Wassertank – Dein Vorrat an Wasser wird nie ausgehen!
- Mehr Ressourcen – Beim Ernten profitierst Du von einer 5% höheren Chance, tolle Ressourcen zu bekommen.
- Große Nachbarschaft – Du kannst nun bis zu 24 Freunde zu Deinen Nachbarn machen.
- Wilde Wiese & Ziergarten – Der Zugang zu beiden Flächen wird Dir freigeschaltet.
- Wachturm – Mit dem Zugang zum Wachturm kannst Du aktivieren, dass das Unkraut auf Deiner Farm sofort gejätet wird und Deine Bäume automatisch abgeerntet werden.

Business Model: Gameloft



- Publisher and developer
 - mobile games
 - console games
- Develops for
 - Java, Brew, Symbian
 - WiiWare and DS
 - Microsoft's Xbox LIVE Arcade and PC
 - Apple's iPod, iTouch and iPhones



Business Model: Gameloft



- 6 major studios
 - US, Canada, Romania, France, China and Japan
- 2,400 in-house developers
- 900 models of cell phones are supported
 - 4 billion game enabled handsets expected in 2012
- 122 million € sales in 2009
- Sales offices and partner in 80+ countries

Agenda



- Business of Games
- Age ratings
- Game Taxonomies

Entertainment Software Rating Board (ESRB)



- For interactive entertainment industry
 - North America
 - Non-profit, self-regulatory
- Goals
 - Assignment of ratings
 - Enforcement of advertising guidelines
 - Help in ensuring online privacy practices

ESRB Ratings Process (1)



- Ratings Process
 - in final stages of development
 - prior to a game being released
- Publishers submit
 - responses to ESRB questionnaire
 - supplementing with lyric sheets, scripts, etc.

ESRB Ratings Process (2)



- Submission is checked for completeness
 - involves ESRB staff members playing a beta or alpha version of the game
- Video footage is reviewed
 - by at least three specially trained game raters
 - full time job, adults, experience with children
- Each rater recommends
 - appropriate rating category
 - content descriptors

ESRB Ratings Process (3)



- Raters deliberate about rating
 - review of prior ratings of similar games
 - consensus on final rating
- ESRB staff members
 - check parity & consistency between ratings
 - issue certificate & rating report for publisher

ESRB Ratings Process (4)



- Publishers may appeal an ESRB rating
 - to an Appeals Board of publishers, retailers and other professionals
- Otherwise complete rating information is posted on the ESRB website
 - rating category, content descriptors, & rating summary
 - 30 days following the assignment of the rating

ESRB Ratings Process (5)



- Prior to release game is sent to ESRB
 - game packaging is reviewed to make sure the rating information is displayed accurately and in accordance with ESRB requirements.
 - play-test are conducted on the final version of a variety of games to verify that materials provided during the rating process were accurate and complete.

ESRB Ratings Process - Result



ESRB Game Ratings

Search Results



ESRB RATING SEARCH APP
FOR iPhone AND ANDROID ►

Your search by title 'world of goo' returned 2 Game Ratings.

Title	Publisher	Rating	Content	Platforms
World of Goo	Microsoft	Everyone	Comic Mischief	Windows PC
World of Goo is point-and-click puzzle game in which players guide goo-like creatures toward level goals. Players can create support structures and bridges from the goo creatures to help navigate hazards. Some levels require setting the [More...]				
World of Goo	2D Boy	Everyone	Comic Mischief	Macintosh, Windows PC, Wii

1 - 2 of 2

ESRB Ratings Process - Criteria



Consideration of

- the most extreme content of the game
 - in terms of relevant rating criteria such as violence, language, sexuality, gambling, and alcohol, tobacco and drug reference or use
- the final product as a whole
 - demonstrating the game's context (such as setting, storyline and objectives) and relative frequency of extreme content.

ESRB Ratings Process - Ratings



- eC (= early Childhood)
- E (= Everyone)
- E10+ (= Everyone 10+)
- T (= Teen; 13+)
- M (= Mature; 17+)
- AO (= Adults Only; 18+)
- RP (= Rating Pending)



ESRB Content Descriptors



- **Alcohol Reference** - Reference to and/or images of alcoholic beverages
- **Animated Blood** - Discolored and/or unrealistic depictions of blood
- **Blood** - Depictions of blood
- **Blood and Gore** - Depictions of blood or the mutilation of body parts
- **Cartoon Violence** - Violent actions involving cartoon-like situations and characters.
- **Comic Mischief** - Depictions or dialogue involving slapstick or suggestive humor
- **Crude Humor** - Depictions or dialogue involving vulgar antics, including “bathroom” humor
- **Drug Reference** - Reference to and/or images of illegal drugs
- **Fantasy Violence** - Violent actions of a fantasy nature, involving human or non-human characters in situations easily distinguishable from real life
- **Intense Violence** - Graphic and realistic-looking depictions of physical conflict. May involve extreme and/or realistic blood, gore, weapons and depictions of human injury and death
- **Language** - Mild to moderate use of profanity
- **Lyrics** - Mild references to profanity, sexuality, violence, alcohol or drug use in music
- **Mature Humor** - Depictions or dialogue involving "adult" humor, including sexual references
- **Nudity** - Graphic or prolonged depictions of nudity
- **Partial Nudity** - Brief and/or mild depictions of nudity

ESRB Content Descriptors



- **Real Gambling** - Player can gamble, including betting or wagering real cash or currency
- **Sexual Content** - Non-explicit depictions of sexual behavior, possibly including partial nudity
- **Sexual Themes** - References to sex or sexuality
- **Sexual Violence** - Depictions of rape or other violent sexual acts
- **Simulated Gambling** - Player can gamble without betting or wagering real cash or currency
- **Strong Language** - Explicit and/or frequent use of profanity
- **Strong Lyrics** - Explicit and/or frequent references to profanity, sex, violence, alcohol or drug use in music
- **Strong Sexual Content** - Explicit and/or frequent depictions of sexual behavior, possibly including nudity
- **Suggestive Themes** - Mild provocative references or materials
- **Tobacco Reference** - Reference to and/or images of tobacco products
- **Use of Drugs** - The consumption or use of illegal drugs
- **Use of Alcohol** - The consumption of alcoholic beverages
- **Use of Tobacco** - The consumption of tobacco products
- **Violence** - Scenes involving aggressive conflict. May contain bloodless dismemberment
- **Violent References** - References to violent acts

Pan European Game Information (PEGI)



- European “ESRB”
- Fully supported by the European Union
- Focus on protection of minors
 - Does not rate challenge or educational value



PEGI Ratings



Unterhaltungssoftware Selbstkontrolle (USK)



- German institution
 - based on the law on protection of minors
 - very strict in Germany (e.g. mail order)
- Games w. USK rating are sold in AT & CH
 - Although PEGI is used there
 - Just one version with German translation





- Games considered “jugendgefährdend”
 - Are not rated by the USK but by the “Bundesprüfstelle für jugendgefährdende Medien”
 - Get on a list of media harmful for minors
 - Cannot be advertised in stores and media or sold to minors
- Criteria

“... vor allem unsittliche, verrohend wirkende, zu Gewalttätigkeit, Verbrechen oder Rassenhass anreizende Medien sowie Medien, in denen (1) Gewalthandlungen, insbesondere Mord- und Metzelszenen selbstzweckhaft und detailliert dargestellt werden oder (2) Selbstjustiz als einzig bewährtes Mittel zur Durchsetzung der vermeintlichen Gerechtigkeit nahe gelegt wird.”

USK & BPjM: Examples



- Return to Castle Wolfenstein
 - was on the “Index”
 - censored version for Germany
 - also because of the “Verbotsgesetz 1947”
- Gears of War
 - was not published in Germany
- Quake, Doom, etc.

Agenda



- Business of Games
- Age ratings
- Game Taxonomies

Game Taxonomies: Scientific Discussion



Classification of games on 4 levels

- Platform
 - hardware: PC, Wii, PS3, etc.
- Milieu
 - visual genre: fantasy, scifi, horror, etc.

Game Taxonomies: Scientific Discussion



- Mode
 - “How the game world is experienced ...”
 - single-player, multi-player, MMO
 - rails, tunnel, or open world
 - competitive or coop
- Genre
 - Problems with definition and classification
 - Understanding as “category”?

Game Taxonomies: Genre



Simulation

- sports, flying, driving, dynamics of cities, communities, etc.
- “laws of physics” vs. “laws of play”
 - cp. Gran Turismo & Super Mario Cart

Game Taxonomies: Genre



Strategy

- Real time vs. turn based
- Integrity is complicated
 - Many games require strategic play (Sim City, Battlefield, Blur, etc.)

Game Taxonomies: Genre



Action

- First Person vs. Third Person
 - From camera perspective (film)
- Player performs a desired action by selecting the correct inputs
 - In contrast to selecting desired actions and the computer will determine the performance

Game Taxonomies: Genre



Role-playing

- Playing a role in a predefined world
- Transforming the role of a character within the game

Conclusion on Apperley (2006)



- Game genres are not very well defined
- They are not mutually exclusive
- People do not agree on a taxonomy

A Game Taxonomy

(Crawford, 1982)



Skill-and-Action Games

- Combat Games
- Maze Games
- Sports Games
- Paddle Games
- Race Games
- Misc. Games

Strategy Games

- Adventures
- D&D Games
- Wargames
- Games of Chance
- Educational Games
- Interpersonal Games

Conclusion on Crawford (1982)



- Crawford considers Donkey Kong
 - Classified as “misc. game”
 - Like a race game with intelligent obstacles
- Paddle games are a dedicated class
 - Nowadays we’d add this to “arcade games”
- Many current categories are missing
 - First person shooters, online games, arcade, casual games, AAA games, etc.

Wisdom of the crowds?



- 84 genres
- Wikipedia
- merged de+en

AAA game
Action game
Action role-playing game
Action-adventure game
Adventure game
Arcade game
Art game
Artillery game
Beat 'em up
Belt scroll
Bishojo game
Browser game
Business simulation game
Casual game
Cinematic platformer
City-building game
Collectible card game
Combat flight simulator
Console game
Construction and management simulation
Core game
Danmaku
Dating sim
Dota (genre)
Dungeon crawl
Escape the room
Fighting game

First-person shooter
God game
Government simulation game
Grand Theft Auto clone
Graphic adventure game
Interactive movie
Japanese adventure
Jump and run
Life simulation game
Light gun shooter
Massively multiplayer online game
Massively multiplayer online role-playing game
Maze
Minigame
Mobile game
MUD
Music video game
Non-game
Nonviolent video game
Otome game
Platform game
Programming game
Puzzle video game
Racing video game
Rail shooter

Railroad game
Real-time strategy
Real-time tactics
Retro game
Rhythm game
Roguelike
Role-playing video game
Shoot 'em up
Shooter game
Sim racing
Simulation video game
Social simulation game
Space flight simulator game
Sports game
Stealth game
Strategy video game
Survival horror
Tactical role-playing game
Tactical shooter
Text Tiles
Third-person shooter
Tower defense
Traditional game
Turn-based strategy
Turn-based tactics
Vehicle simulation game
Vehicular combat game
Wargame

Meta Sites



Metacritics

- Action
- Action Adventure
- Adventure
- Driving, Racing
- Music
- Puzzle
- RPG
- Shooter
- Sports
- Strategy

Gamerankings

- Action
- Action Adventure
- Adventure
- Driving
- Misc.
- Role-playing
- Simulations
- Sports
- Strategy

Thanks ...



... for your time