Day 1: The Computer and Videogames Market Dynamics

Day 2: Financing and Producing PC Games

- Teut Weidemann
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- Wings Simulations GmbH
- A JoWooD company
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Wings Simulations GmbH

- founded 1996 by
  Teut Weidemann
- 17+ years experience in the games industry
  (first solo games producer in germany)
- Over 35 titles since 1985
- Last title is „Panzer Elite“, a historical tank simulation
- Current title is „Söldner“, a Multiplayer Military Tactical Shooter
- In Mai 2000 Wings fusioned with Jowood AG, which is noted on the Vienna stock exchange

Title History

Production experience since 1985:

Detonator, Katakis, Denaris, R-Type, Turrican, Spherical, Conqueror, Startrash, M.U.D.S., X-Out, Strike Base, Kellogs Game, Panzer Elite

And many more. (most on old formats like: Commodore C64, Amiga, Atari St, Amstrad, Spectrum)

released 22. Oktober 1999

Gamestar: 84% // PC Action: 86% // PC Games 83%, Simulation of the Year (USA)

Still on sale worldwide despite its age

More info on www.PanzerElite.com

Currently in Production: Söldner - Secret Wars

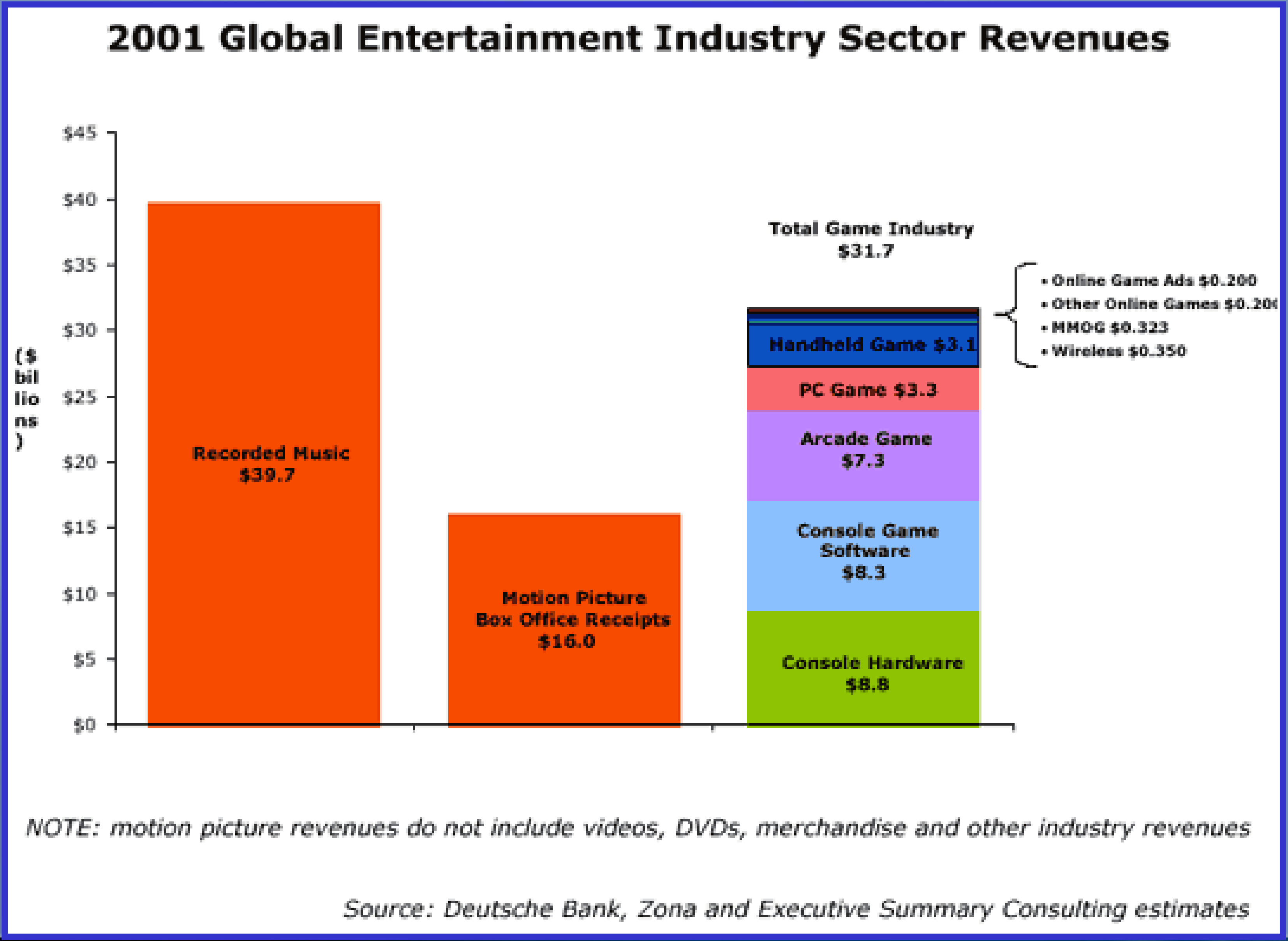
- Genre: Military Multiplayer Tactical Shooter
- Sold in all major countries to publishers
- Primary title of Jowood this year
- Already previewed in major magazines
- Hype is starting due to online presence
- should be released end of 2003

The Games Market today

(some call it interactive entertainment industry
but hey, its all about games)

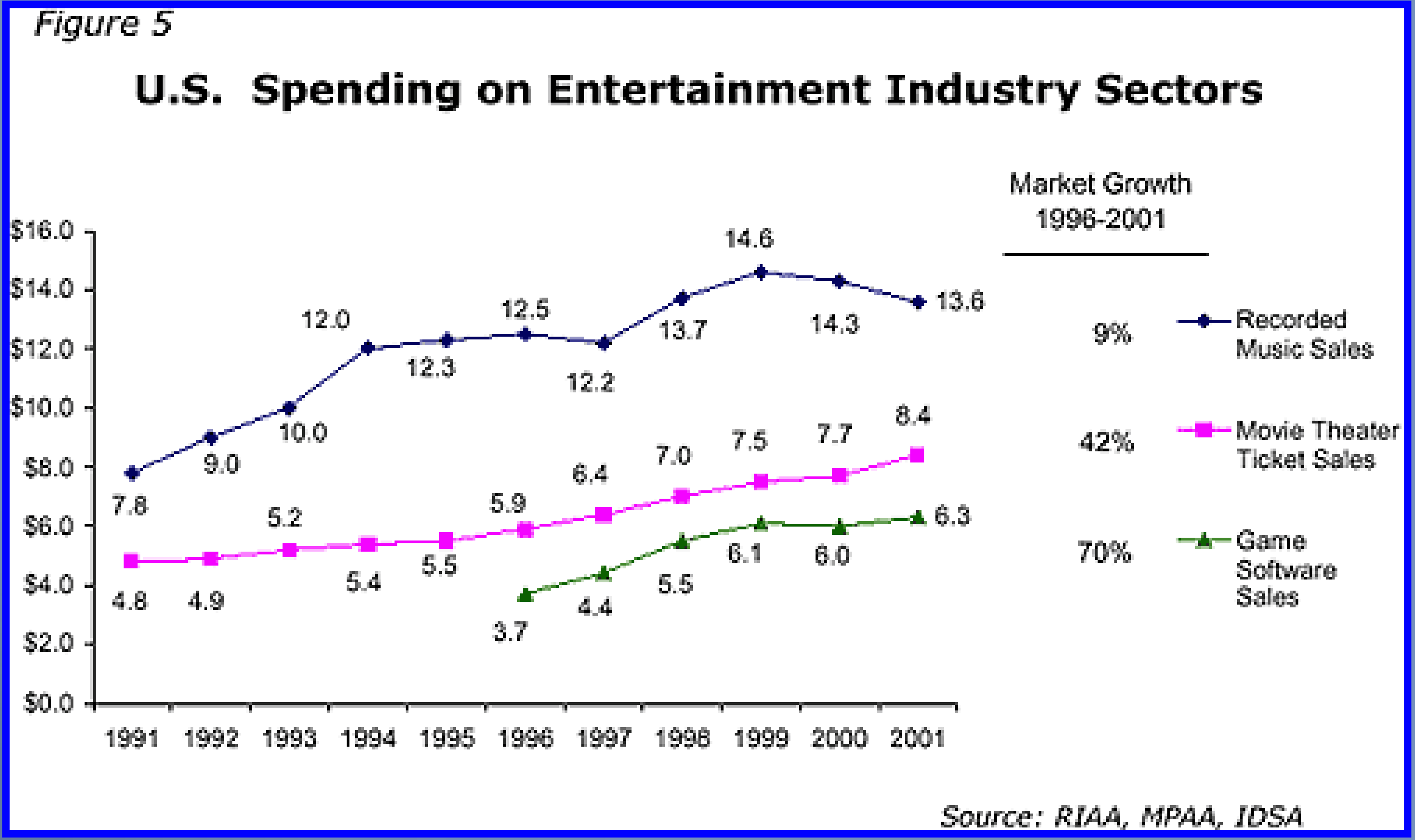
- Consoles („Videogames“)
- PC (Windows)
- Handhelds (Gameboy and recently Cellphones)

Market Data Entertainment sector



Market Data: Industry Growth

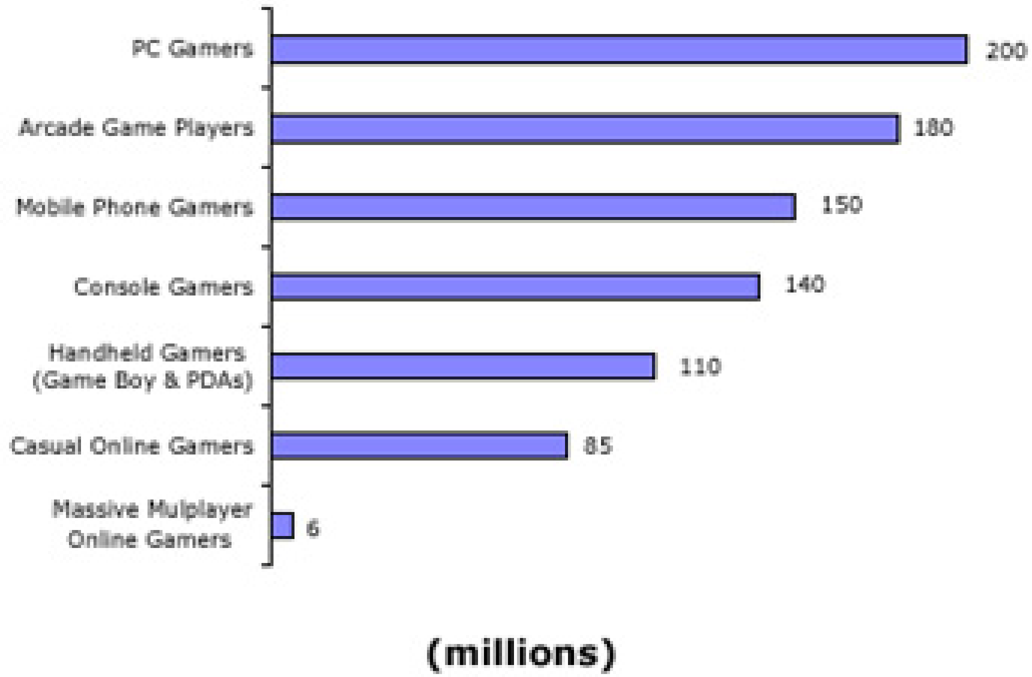
Figure 5



Market Data: Worldwide Players

Figure 1

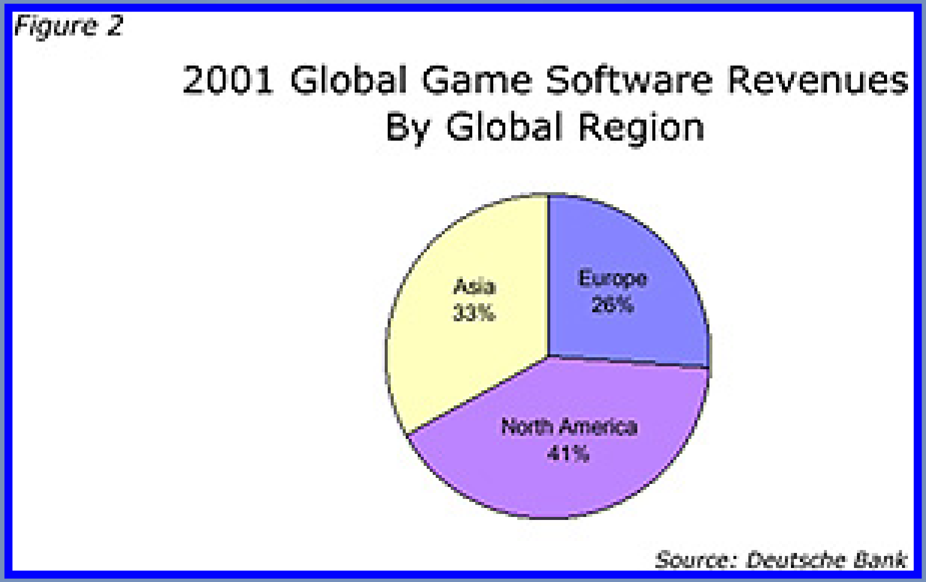
Number of Game Players Worldwide 2002 by Type



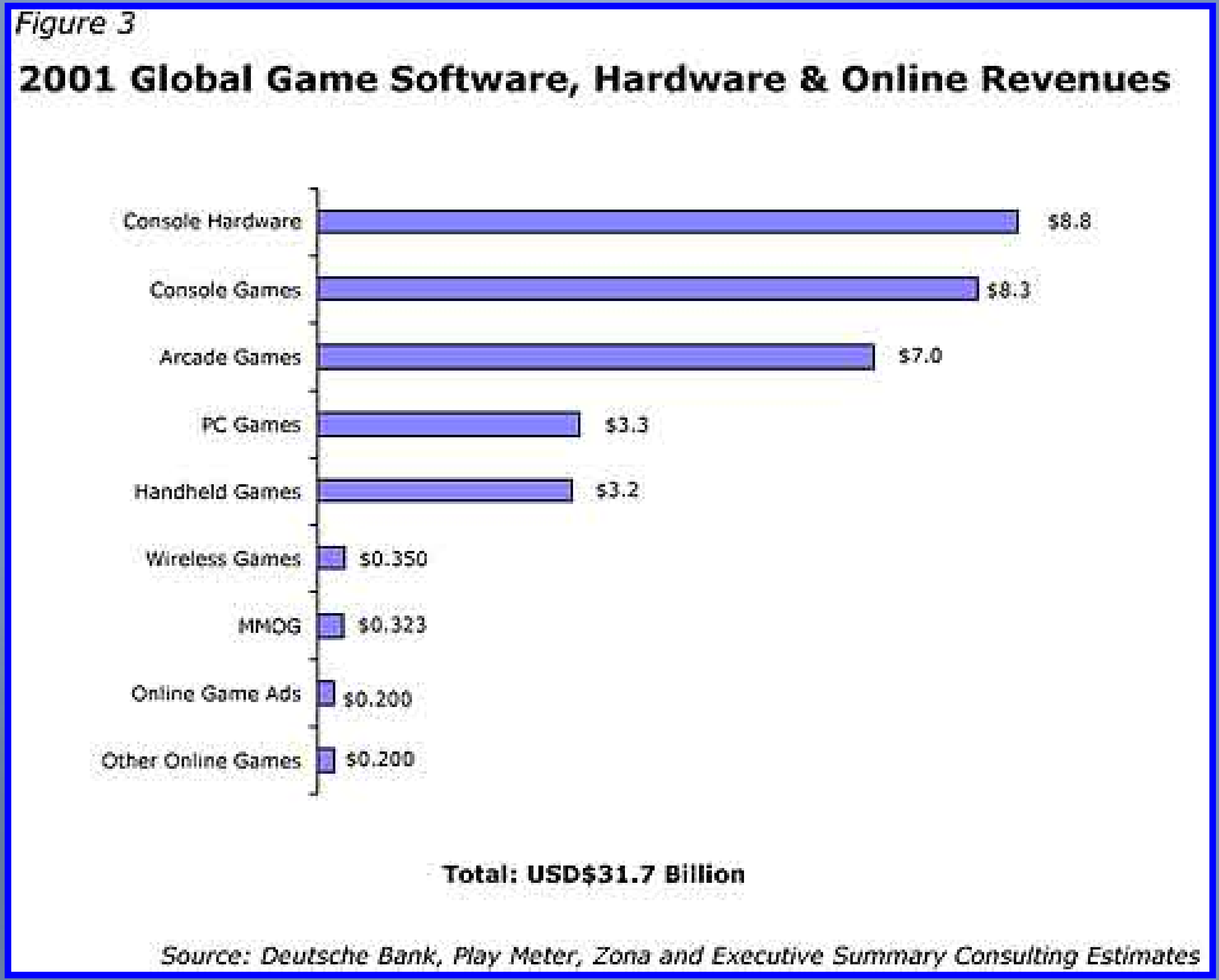
NOTE: Many gamers play on multiple game platforms. The total consolidated gamer universe across all platforms is estimated to be 430 million worldwide.

Source: Zona and Executive Summary Consulting Estimates

Market Data: by Region

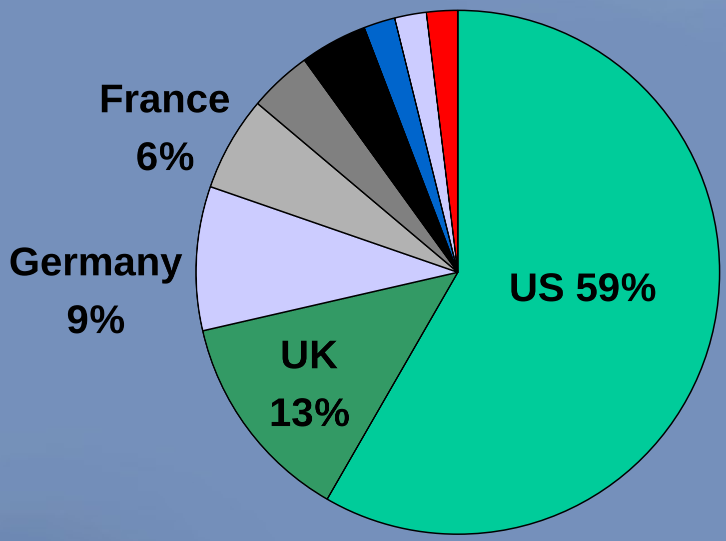


Market Data: Revenues

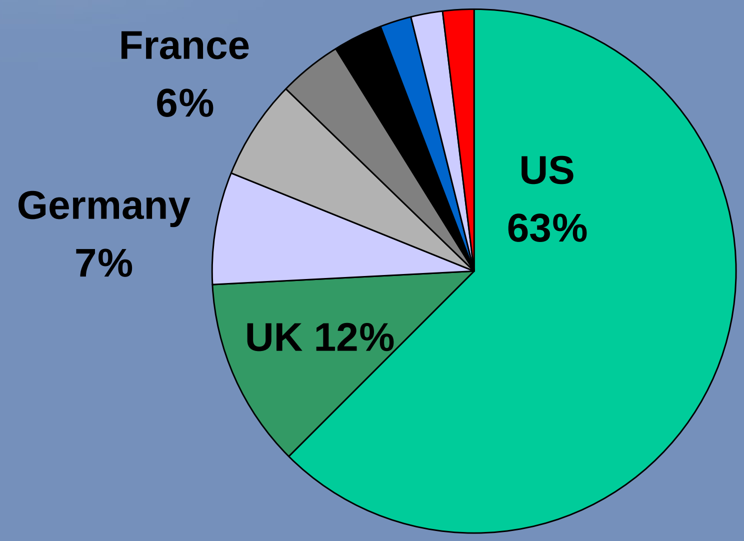


N. American and W. European PC, console and handheld game software market ($)

2001 Dollars: $9.6 billion



2002E Dollars: $12.8 billion



- The N-American and W European game market is dominated by the US
- US, Canada, UK expected to grow strongly in 2002
- France growth slower, Germany stagnant

Source: Simon Price, Analyst, International Development Group

N. American and W. European PC, console and handheld game software market (dollar sales)

W. Europe expected to account for 34% of N. Am/W. Eur combined in 2002

	2001 ($b)	2001 (%)	2002E ($b)	2002 (%)
United States	$5.71	59%	$8.06	63%
United Kingdom	$1.23	13%	$1.53	12%
Germany	$0.86	9%	$0.89	7%
France	$0.60	6%	$0.74	6%
Canada	$0.35	4%	$0.51	4%
Scandinavia	$0.35	4%	$0.37	3%
Italy	$0.19	2%	$0.23	2%
Benelux	$0.19	2%	$0.27	2%
Spain	$0.17	2%	$0.22	2%
Total	**$9.63**	**100%**	**$12.82**	**100%**

Source: Simon Price

Games Per Household, 2001

UK on a par with US, everyone else has plenty of room for growth
(Canada may be underestimated)

	Units	$ spent
United States	1.9	$54.40
United Kingdom	1.6	$51.10
Scandinavia	1.0	$34.20
Canada	1.0	$29.10
France	0.9	$24.90
Germany	0.8	$22.90
Benelux	0.6	$17.10
Spain	0.6	$12.70
Italy	0.3	$8.40

Source: Simon Price

Entertainment Software Unit Sales, 2002E

Measured by unit sales, PC is the largest platform in each territory…

	US	Canada	Germany	UK	France	Scand-inavia	Benelux	Italy	Spain
Nintendo 64	1%	1%	2%	0%	1%	2%	2%	1%	1%
GameCube	10%	9%	4%	9%	5%	4%	4%	4%	6%
PlayStation	15%	14%	15%	13%	17%	7%	8%	9%	9%
PlayStation 2	26%	24%	15%	28%	27%	16%	24%	19%	23%
Xbox	10%	9%	4%	8%	5%	3%	5%	6%	8%
Game Boy/Color	3%	4%	3%	3%	3%	1%	2%	4%	6%
Game Boy Advance	9%	13%	9%	9%	9%	5%	9%	19%	16%
PC	26%	26%	49%	31%	33%	63%	46%	39%	31%
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Simon Price

In other words…

- For PC games, Europe (especially Germany) is as important as North America
  - 45% of N Am/Euro PC game revenues came from Europe in 2001 and the same expected in 2002E
- For console games, North America is key
  - Only 34% of N Am/Euro PS2 software revenues came from Europe in 2001 and 30% in 2002E

Source: Simon Price

Worldwide Console Demographics

…Although UK and US have similar consumption levels, the console age profiles are very different. All have similar 16-26 core group, but UK has a larger 27+ group

Expressed as Percentages

Gender	***US***	***Japan***	***UK***	***France***	***Germany***	***Italy***	***Spain***
Male	**78**	**80**	**78**	**82**	**72**	**84**	**70**
Female	**22**	**19**	**22**	**18**	**28**	**16**	**30**

Age	***US***	***Japan***	***UK***	***France***	***Germany***	***Italy***	***Spain***
12-15 yrs	**33**	**44**	**21**	**29**	**24**	**29**	**34**
16-26 yrs	**41**	**34**	**25**	**41**	**39**	**38**	**45**
27+ yrs	**26**	**21**	**54**	**30**	**37**	**33**	**21**

Note: this is different on the PC platform

Source: Microsoft survey, 2001 (pre-Xbox)

History of Video Games

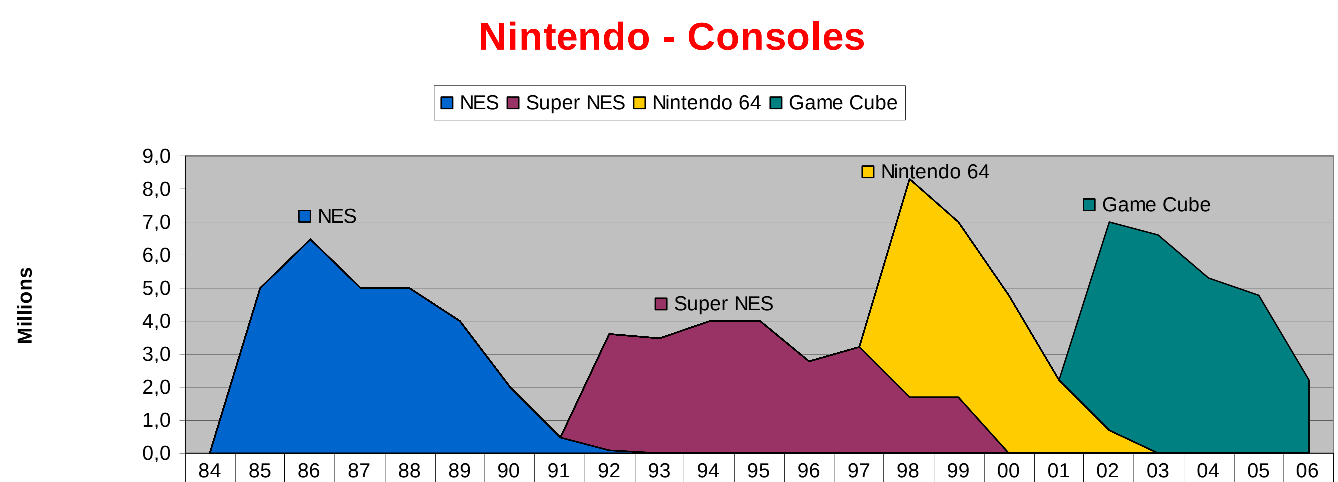
Company	*System*	*Technical Gen.*	*Release (J)*	*Release (USA, EU)*	
(atari)	VCS 2600	too low	??	1977	
Nintendo	**NES**	8-Bit	1983	**1985,1987**	
Sega	**Master System**	8-Bit			
Sega	**Mega Drive**	16-Bit	1988	**1990**	
Nintendo	**Super NES**	8-Bit/16-Bit	1990	**1991**	
Sega	**Saturn**	32-Bit	1994	**1995**	
Sony	**Playstation**	32-Bit	1994	**1995**	
Nintendo	**N64**	64-Bit	1996	**1997**	
Sega	**Dreamcast**	64-Bit/128-Bit	1998	**1999**	
Sony	**Playstation2**	128-Bit	2000	**2000**	
Nintendo	**Gamecube**	128-Bit	2000	**2001**	
Microsoft	**Xbox**	128-Bit	2001	**2002**	

Sorted by Year

	Nintendo	Sega	Sony	Microsoft
1985	NES*			
1986	(Japan only)			
1987				
1988				
1989		Genesis		
1990				
1991	SNES			
1992				
1993				
1994		Saturn	Playstation 1	
1995				
1996	Nintendo 64			
1997				
1998				
1999		Dreamcast		
2000			Playstation 2	
2001	GameCube			Xbox
2002				
2003				
2004				Next Gen?
2005	Next Gen		Next Gen	
2006				

Nebenbei: Atari VCS 2600: 1980 …

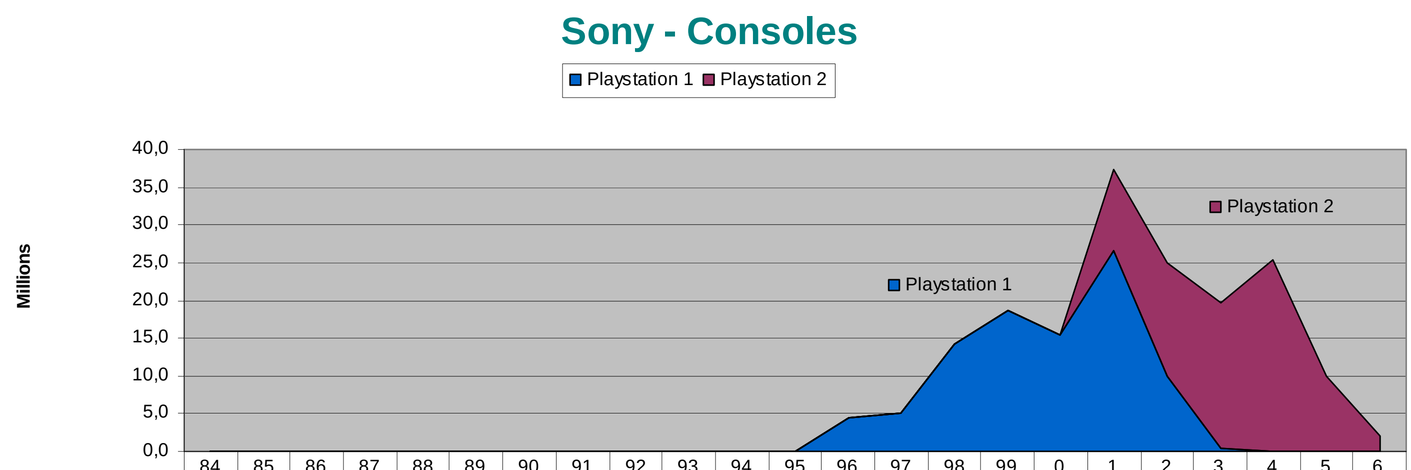
Nintendo Console Sales



	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Game Cube																			6,3	6,6	5,3	4,8	2,2
Nintendo 64															6,6	5,3	4,8	2,2	0,7				
Super NES									3,5	3,5	4,0	4,0	2,8	3,2	1,7	1,7							
NES	0,0	5,0	6,5	5,0	5,0	4,0	2,0	0,5	0,1	0,0													

Numbers are sales per year, not total sales
Source: "Famicom Tsushin", 1995 – 2001
(assembled by Winnie Forster)

Sony Console Sales:



	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	0	1	2	3	4	5	6
Playstation 2																	0,0	10,6	15,0	19,2	25,3	10,0	2,0
Playstation 1													4,5	5,0	14,3	18,7	15,5	26,7	10,0	0,5			

Numbers are sales per year, not total sales

Historical Overview

													Total sales (world)
	to 3/94	**to 3/95**	**to 3/96**	**to 3/97**	**to 9/97**	**to 3/98**	**to 9/98**	**to 3/99**	**to 9/99**	**to 3/00**	**to 9/00**	**to 3/01**	**Stand: 3/2001**
NES	18,6/42,4	18,8/42,5	18,9/42,5										**61,4 million**
Mega Drive	3,45/19,1	3,55/23	3,85/25										**28,85 million**
Super NES	11,8/20,3	14,5/22	16,2/26	16,9/28,7	17/29,7	17/31,3	17,1/31,9						**49 million**
Sega Saturn		0,84/---	2,5/0,9	4,8/2,7	5,2/3	5,6/k.A.	5,74/3	5,8/---					**6 million**
Playstation		0,85/---	2,5/2	6,5/7	8,6/11,4	11,5/21,3	13,1/30	15,3/40	16,6/48,6	17,4/55,5	18/75,5	18,5/82,2	**100,7 million***
Nintendo64				2/3,4	2,5/9	3,1/k.A.	3,5/16,3	4,4/20	5/23,8	5,3/24,8	5,4/25	5,5/27	**32,5 million**
Dreamcast								0,9/---	1,4/0,6	1,8/3,8	2/5,9	2,25/8,2	**10,45 million**
Playstation2											3,5/---	4,75/10,6	**15,35 million**
Xbox (2003)													**9,4 million**
Playstation 2													**45 million***
		Numbers a	Japan/US+EU										

Console Market: Hard Facts

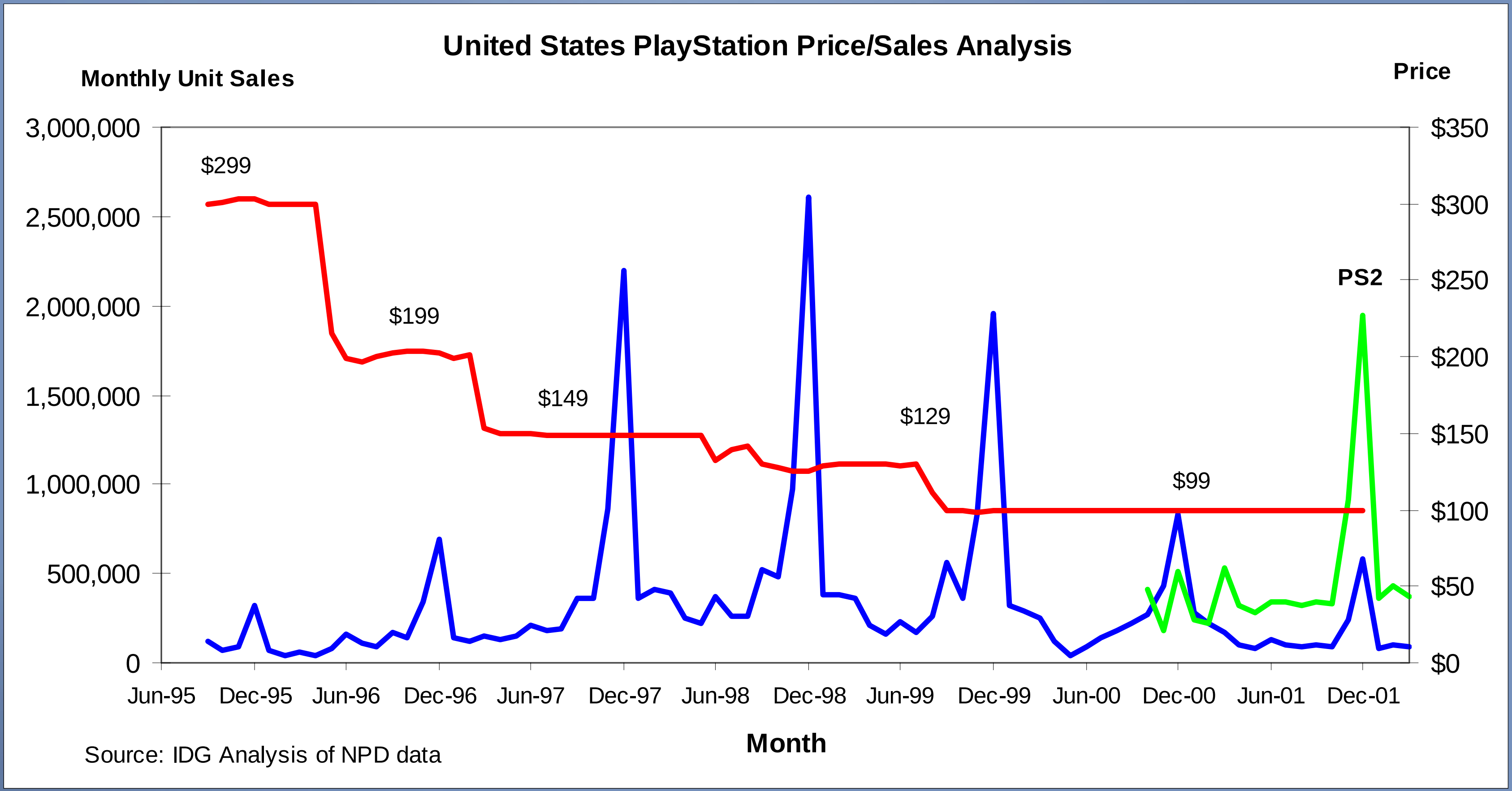
-Games sold per Customer per life cycle of console: 4-6 average
-Most games are bought within the first year of ownerage
- most titles are sold during the christmas period
-Therefore: customer is most important within the first year of his console

-In other words: the more consoles are sold within a year the more money can be made by games released

-Or: if console sales drop the market is in a very bad shape

-Consoles sell more if they are cheap (what isn‘t?)
-New consoles are usually launched at $299

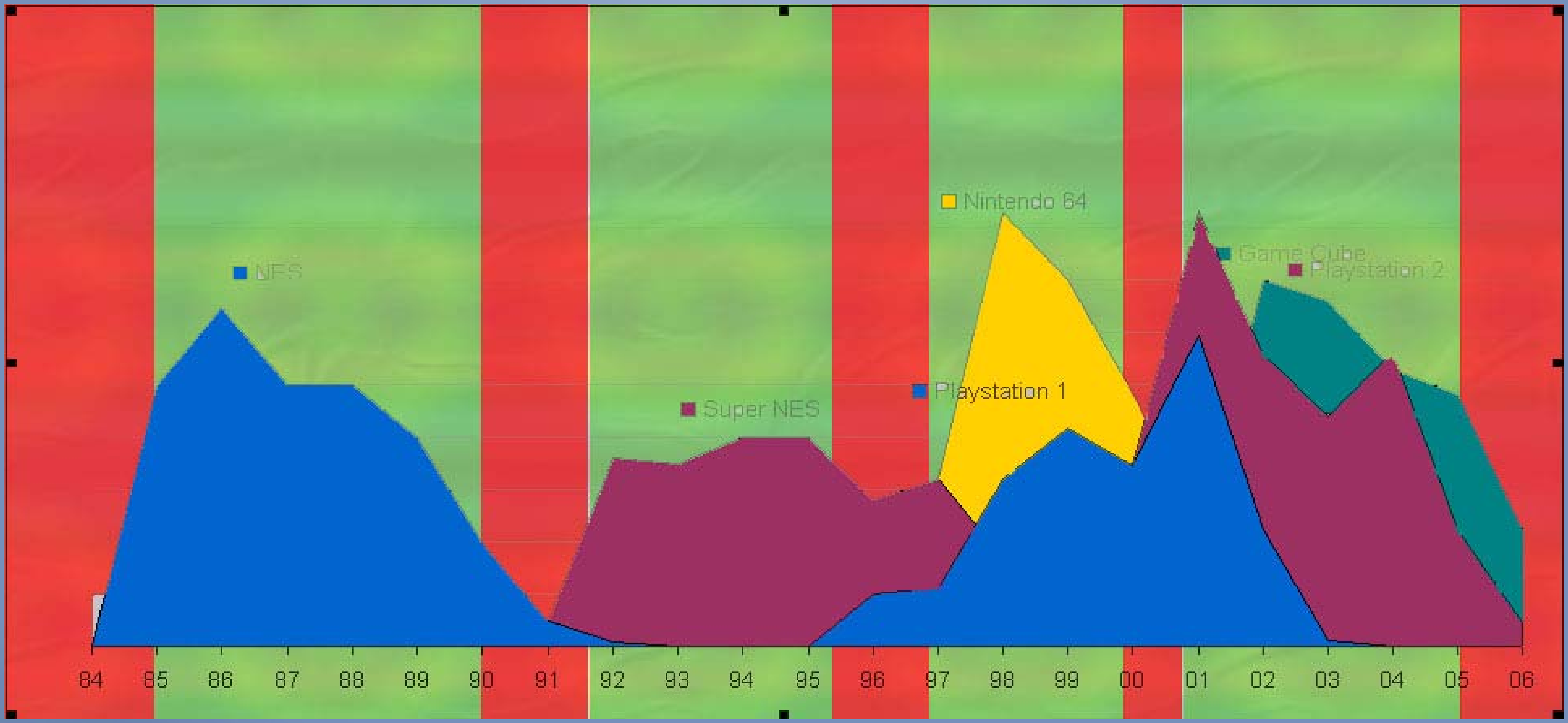
PlayStation hardware sales took off at $149



WINGSSIMULATIONS

JoWooD Productions

Console Periods: History and Future



Bad years:
1990/91
1995/96
2000/01
2005/06

Good years:
1985-89
1992/95
1997/99
2001/04

Console Development Facts

- Development Kits are expensive ($15.000 to $20.000)
- You need 10-15 of those...

- Currently 15-18 Month minimum Development time, 24 months much more realistic
- New generation of console means new tools need to be developed

- Game needs to go through manufacturers Quality Assurance, thats about 3 months hard work

- When game is finished you need to order your copies from the console manufacturer
- You have to pay in Advance
- When you get your stock full of the game you haven‘t sold a single copy yet
- Marketing costs a fortune for console games (console SI magazines dont have a real penetration)

Rough Outline of a console life cycle

Year 1: New format being released (usually first in Japan)
- Launch titles, usually from established console publishers
- First generation of technology
- Original licenses are usually established here

Year 2: First „hot“ X-Mas
- Second generation of titles (look MUCH better than the first)
- First sequels being released
- Mass move of major publishers to the leading console format

Year 3: Golden Console Year, Mass Market, Console is now competition to major entertainment industries like TV and Movies
- many many titles being released (market is being flooded)
- Major licenses and IP‘s start to work
- very high marketing spent of the industry
- thus „Awareness“ of games are very high in all media

Year 4: Over Saturation, Console Price wars, console shows its (technical) age
- Number of titles now endless
- Fewer products sell more, or: the top 10 sell 80% of the volume
- IP‘s and sequels from year 1-3 sell due to their brand awareness
- internal anouncement of the new console generation

Year 5: Consoles are $99 cheap products, Sell out, official anouncement of new console generations
- Console as „hot sale“ item
- Publisher/Developers now concentrate on the new generation of consoles
- remember: console now is 6+ year old technology
- (6 years ago the PC was 166MMX ☺

Year 6(1): New console generation is being launched
- see year 1

Console Cycle from a publishers view

Year -1: Internal anouncement of the new console generation
- Evaluation, Deals
- major console publishers start development of new technology and games

Year 0: Mass Development Start on new platforms
- Dev Kits need to be ordered (major investment, $10.000+ each)
- Income from old console generation decreases (old gen is in year 5)

Year 1: Launch!
- Small risk: which format will win?
- Development of 2nd generation games start

Year 2: Money is coming!
- earnings rise sharply
- Fight begins: marketing budgets are rising

Year 3: Money source #1 are console games now
- Console and games marketing is present in all media
- some titles are as popular as big movies
- most important year to put savings aside for the bad years

Year 4: Oversaturation, Pricewars, Consoles show their age
- Earnings drop
- Less new development starts on the current platforms
- Internal anouncement of new console generations

Year 5: Sell out, official anouncement of new console generation
- close to none new products are being developed on old platform
- Less income from old platforms, new platform hasn‘t been established yet

Cycle Consequences

Syncronising development cycles gets harder
- Playstation 1: 9-12 months development time
- Playstation 2: 15-24 months development time
- compare this to 5 year life cycle

Entry into this market is tough to impossible (timing!)
- Bad years: only big players present, usually with internal development
- good years: no reference titles, no experience, most slots are already closed

Marketing is very expensive, thus risk is high, thus publishers are more picky

IP's work: Final Fantasy, Tekken, Mario, etc. But how to create one?

Investments in console market is very high: devkits, technologie, marketing

Consequence:

Publisher think conservative, less risk taking
meaning new products have less chance
new ideas have zero chance

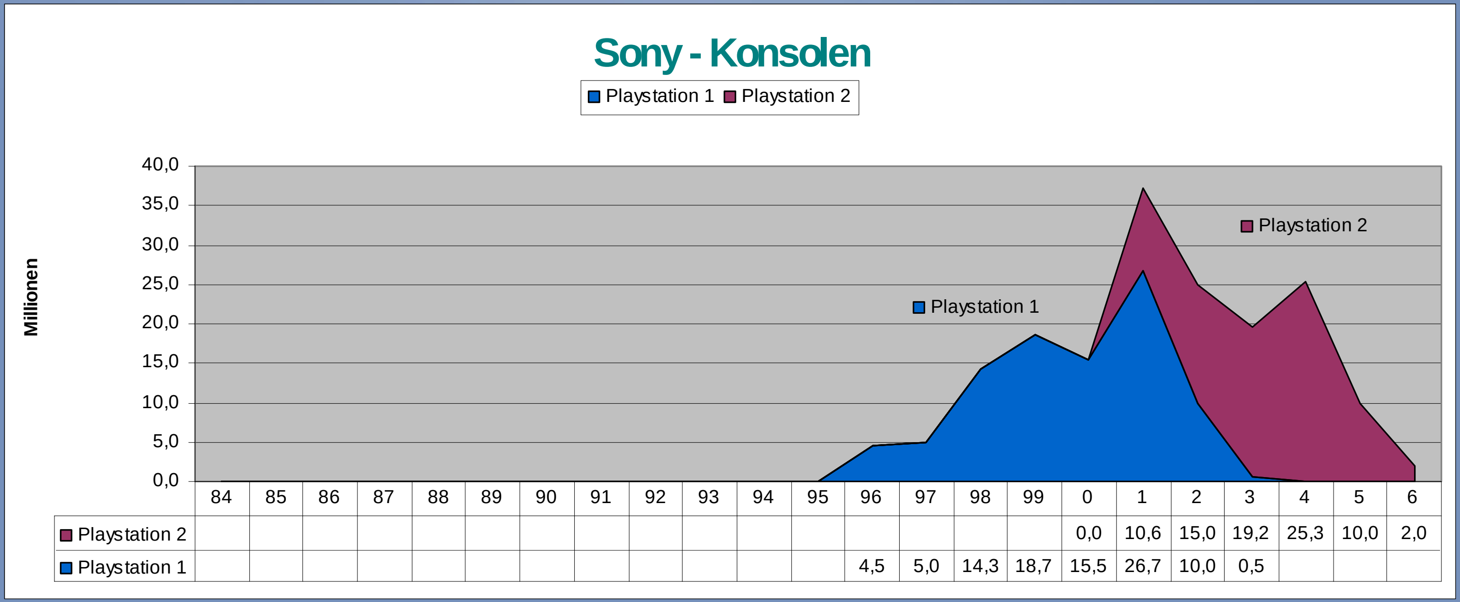
Market suffers during transition period:

Less spent in marketing during bad years
Means less advertising
Means magazines suffer during transition periods:
- less marketing spend
- means less advertising
- means magazines suffer

And: investors always loose as they invest too late.

-> Why?

Investors are a greedy bunch:



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Playstation 2																	0,0	10,6	15,0	19,2	25,3	10,0	2,0
Playstation 1													4,5	5,0	14,3	18,7	15,5	26,7	10,0	0,5			

- Investors are drawn by turn over of market
- market data usually comes after a year
- plus decision delay
- plus development time (1-2 years)
- then the investor comes to market exactly when...

- the format is already dead!

Investors Demise: Examples

1st Generation (Atari VCS, Colecovision, Intellivision) (1980-1985)

- Demise of the VCS forces many publishers into Chapter11 (Developers during that time were 1 man teams!)

- Crash of the VCS market created the „Consoles never will work“ misconception

2nd Generation (NES, MasterSystem) (1985-1990, Transition 91-92)

- Gaming industry suffered and was reduced heavily

- transition killed the classic „home computers“ (Amiga, Atari, C64)

3rd Generation (SNES, Genesis): Hollywood/Medien tries us! (1990-1995, Transition 95-97)

1994: Turner, MCA-Universal, MGM

1994: Dreamworks Interactive (gone: 2000, assets were bought by EA)

1996: Fox Interactive (gone: still breathing!)

1995-1997: Gte, Philips, Time Warner, Wirecom

4th Generation (N64, Psx1): Toy industry tries us! (1995-2000, Transition 00-02)

1998: Mattel goes shopping (gone 2000: Verkauf Gores und dann an UBI Soft)

1998: Hasbro goes shopping (gone: 2000, Reste/Rechte von Infogrames gekauft)

5th Generation (Psx2, GameCube, Xbox) (2000-2005, Transition 04-05?)

Who will come too late this time?

My bet: cellphone companies ☺ Nokia, Siemens, Sony Erricson are already looking

Market Consequences

Magazines die:

Less advertising kills financing of most magazines

Transition 95/96:

Gamers, Total, Playtime, …

Transition 00/01:

MegaFun, PSM2, Fun Generation, VideoGames,
PC Player, PC Joker

And more important: 80% of all gamesites were killed and gone forever (due to online advertising crashing)

Publisher Consolidation:

Mai 1996: 40+ Publishers

Mai 2002: less than 10 really important ones

And it goes on: Vivendi is on sale, Empire is shaking, etc.)

The Developer Deaths

2002: in UK over 20 Teams die, still going on

2002: in Germany 80% of all teams died

In USA the team deaths happened already in 2001 (Looking Glass, and more)

Consequences for PC Games

- During transition periods its tough to sell original titles (ie. non IP or license)
- risk projects or risk teams (newbies) are close to impossible to sell to publishers
- rumour surfaces again: „PC market is dying“ (I heard this 3 times now and the PC still breathes)
- PC market suffers, bad sales numbers have effect on profit calculations and budgets of PC games
- this means publishers only sign conservative games, which means:
    - Games which already performed
    - Games which are similar to games which performed
    - So we see mostly: sequels, clones, sequels, clones, sequels ...

PC Games now dying?

Usually the PC safes himself through gadgets which allows him to „reset“:

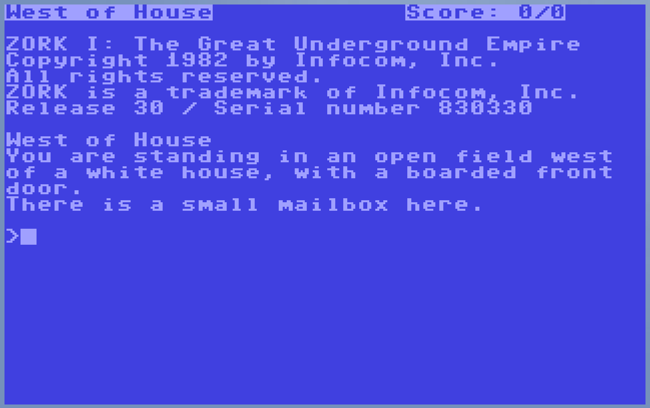
Historical Gadgets:

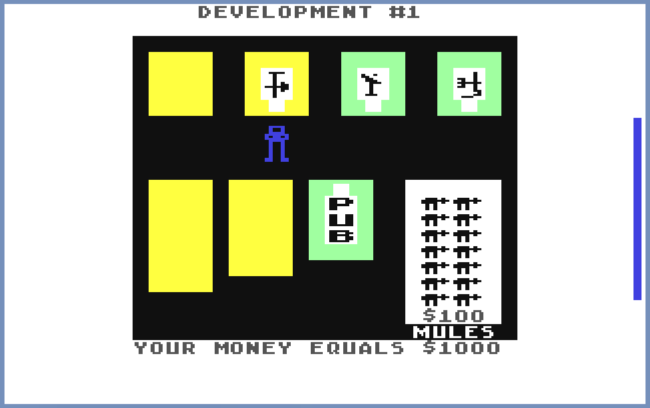
- 1990: EGA to VGA: Wing Commander makes VGA standard
- 1993: CD-Rom. Porn and Myst for the masses (and Rebel Aussault)
- 1994: VGA to Super VGA: Wargames Revitalized
- 1996: Windows 95: Gaming for the masses (easier configuration and setup), DirectX
- 1996: 3d comes: Voodoo 1 released (10/96)
- 2000: new generation 3d Hardware: Polygon Look is gone
- but now: most games really look alike now, do they?

Lets take a look:

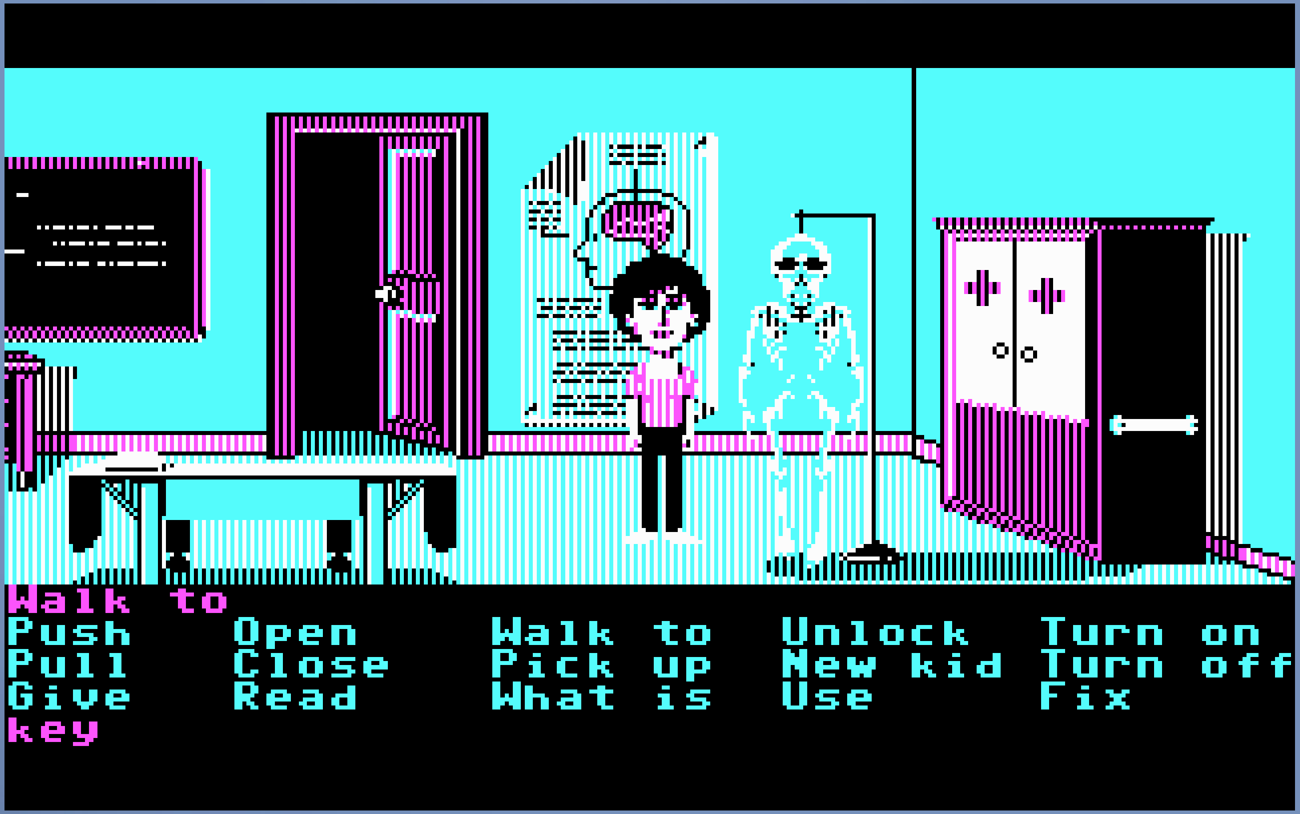
Pre PC

(homecomputers)



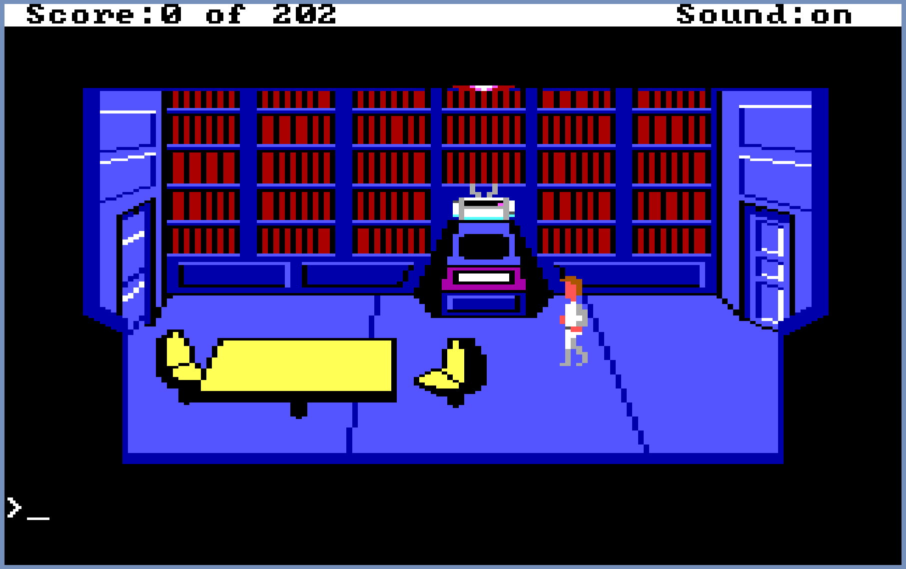


CGA (1985)


Walk to
Push Open Walk to Unlock Turn on
Pull Close Pick up New kid Turn off
Give Read What is Use Fix
key

EGA (1987)


Walk to
Push Open Walk to Unlock Turn on
Pull Close Pick up New kid Turn off
Give Read What is Use Fix
key silver key
cassette tape


Score:0 of 202
Sound:on

VGA (1991)


Walk to
Give Pick up Use
Open Look at Push
Close Talk to Pull


Walk to
Open Walk to Use
Close Pick up Look at
Push Talk to Turn on
Pull Give Turn off

SVGA (1992?)

3d. 1st Gen (1994)

3d. 2nd Gen (1996)

3d. 3rd Gen


100
100
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3d. 4th Gen


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TEEN
T
ESRB
GENERALS
G


WORTHPLAYING.com

3d. 5th Gen

And for the first (2nd) time:

- Since 2000 PC games look similar, so old content can't be „resold" like before
- For the first time consoles are as powerful as the PC and can deliver similar game experiences
- Consequence: its reasonable to develop on 4 platforms at once: PC, PSX2, GC, XBox
- This allows one marketing for 4 platforms, or: it allows 4x marketing spent for one game
- This allows huge licenses be bought and marketed: Harry Potter, Lord of the Rings

- Usually after 3 years the PC was looking much much better than consoles
- Not this time: the next graphical revolution is still years away

-And: the next generation of consoles (PSX3) has fearsome technology while the PC is locked in intels and microsofts „compatibility" trap

- Consoles are easier to use, cheaper, smaller, sexier

Will the PC die this time?

What will save the PC this time?

Since 2000 we look for the big „thing“ which will saves the PC

- except „online“ now new toy to play with
- „look“ enhacement speed slowed down since 3 years
    - therefore longer shelflife for older titles (Halflife, Starcraft etc.)
    - therefore new content is needed, but no one delivers (risk projects)
- Online is only 4-5 years old, Return of Investement is still experimental like:
        - CD-Key revenue (Halflife, Starcraft, Diablo)
        - Subscription revenue (Ultima Online, Everquest, Asherons Call)
        - Advertising driven
        - ???

What will save the PC this time?

And bad things about the PC market specifically for Germany:

- secondary marketing in germany kills full price games:
  - full games on magazines
  - Gold Games Super Bundles
  - Price drop too fast, even for hit titles
  - therefore „price value“ in the minds of customers for PC games drop
  - retail is trained to sell through very fast and drop older games from the shelf
- and of course piracy:
  - through internet and DSL the access to pirate copies is easier than ever before

Is the PC market dead?

PC Games Releases 1999-2002

	1999	2000	2001	2002
Games Released:	300	251	255	256
Original Games:	61%	50%	57%	48%
Sequels:	22%	33%	29%	29%
Add-ons:	7%	6%	7%	11%
Bulk Packs (Gold Editions and the like.)	10%	11%	5%	7%
Collector's Editions (Released simultaneously with original)	.5%	2%	1%	2%

	1999	2000	2001	2002
Strategy:	18	13	38	33
Turn Based Strategy:	15	16	8	9
Real Time Strategy:	24	22	31	24
War Games:	18	8	11	9
Sports:	35	27	14	18
Flight Sims:	12	11	10	3
Role Playing:	15	17	15	14
Action:	72	65	60	64
Adventure:	5	8	19	22
Family:	20	15	6	11
Racing:	20	13	10	11
Misc:	9	6	15	18
Online Only: (Includes MMOG'S)	4	6	10	12

source: http://www.gonegold.com

No!

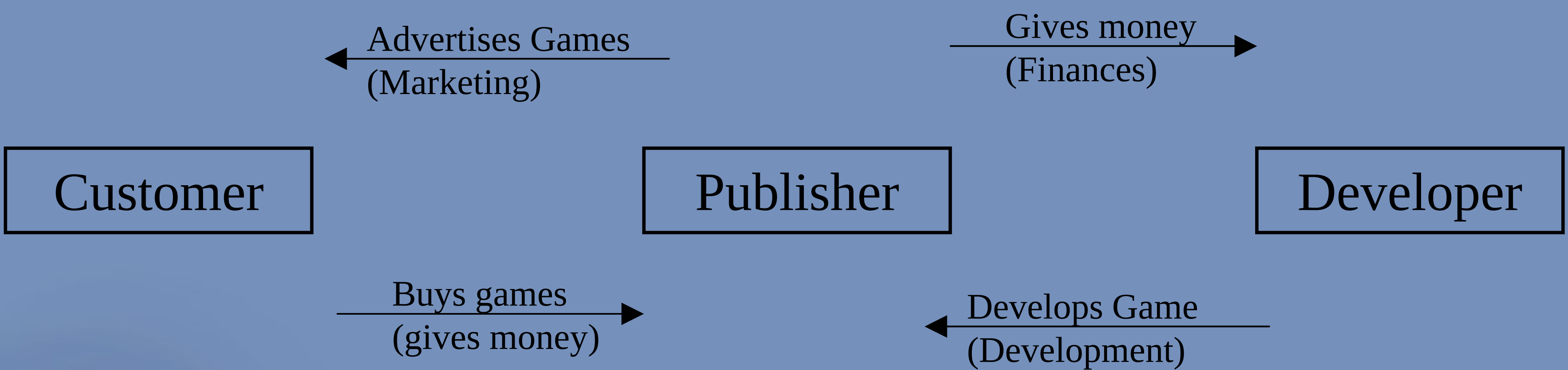
- Market is maturing
- New content is key
- Adapt to the new market
- Online is still „owned“ by the PC
- Next gen consoles might change this, but those are 3 years away
- Publishers need to take more risks, but thats a tough one to sell ☺
- Mouse doesn‘t work on carpets (strategy and somewhat fps)
- PC gets more powerful every year, consoles only every 5 years

The question will be: Will the PC games market be big enough compared to the console market that publishers think its worth supporting?

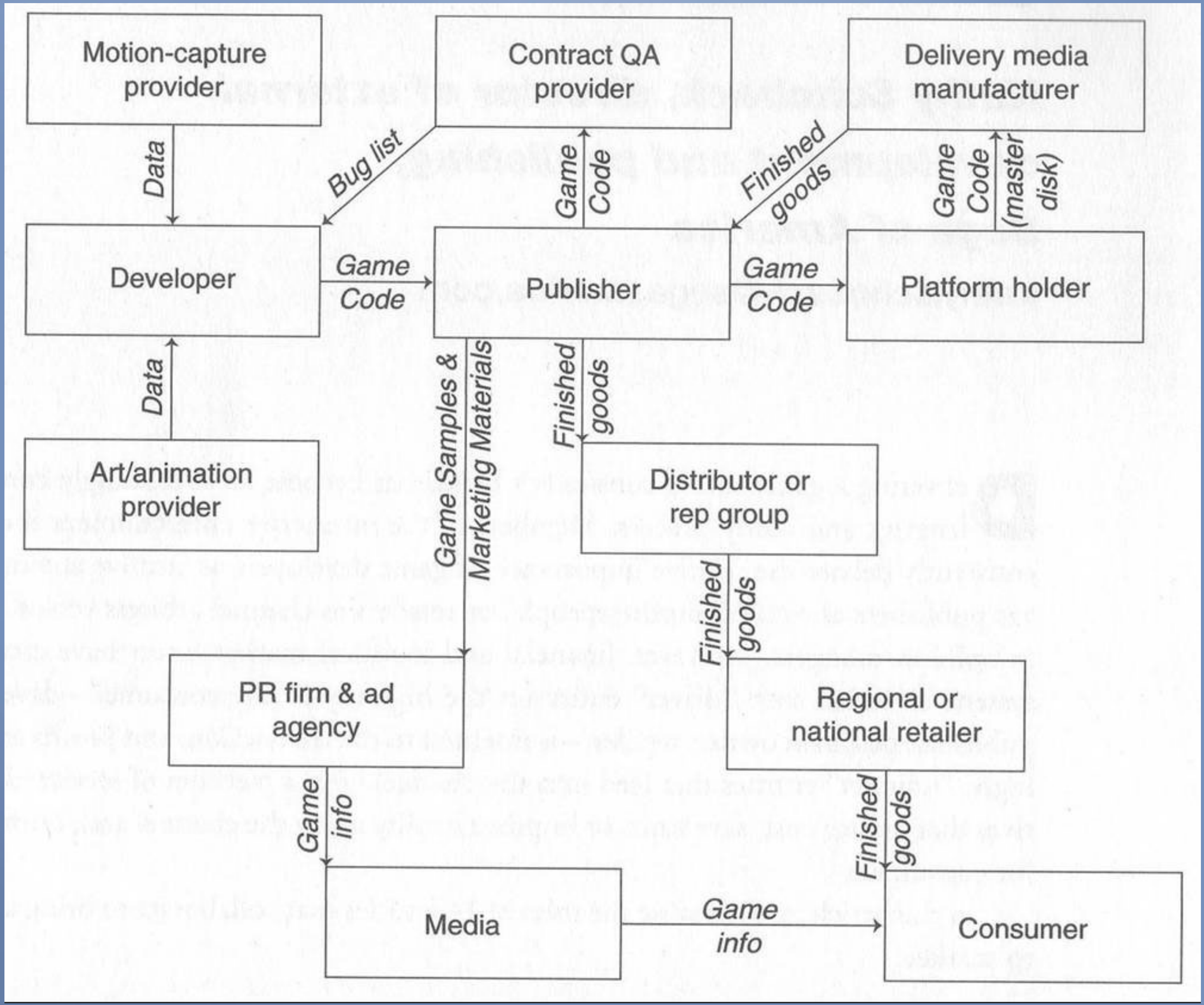
So lets look into the makers, the publishers and developers

Developers and Publishers internals

Basic Relationship



Advanced Relationship



Source: Secrets of the Game Business

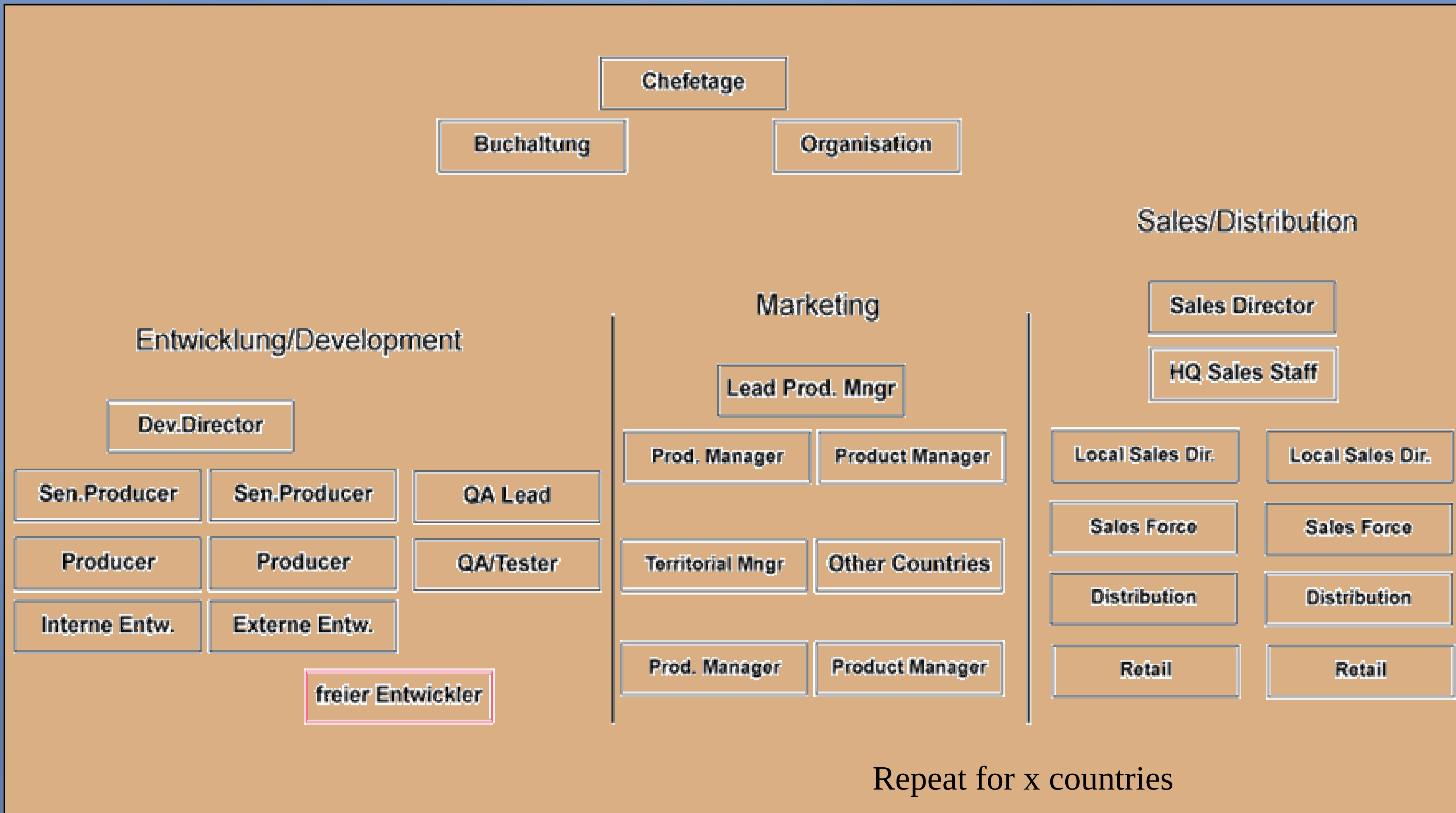
Publisher Structure: Easy Model

AcclEAMicroGrames

Management
President
Controlling
Accounting

Development	Marketing	Sales
Director	Director	Director
Producer	Product Manager	Representative
QA/Testing	Creative Dept.	Territories

Publisher Structure: Complex Model



Developer Structure: Easy Model

Da Boss

Designer

Artists

Programmers

Developer Structure: Complex Model

	Da Boss		
	Assistant		
Producer	Executive Pr.		
Lead Artists	Lead Progs	Lead Design	Lead QA
Artists	Engine Progs	Level Design	QA
Animators	AI Progs	Script Design	Sys Admin
Texturers	MP Progs	Unit Design	Web Master

Developer <-> Publisher

Developer | Publisher

Producer ⟷ Producer

If it would be that easy ...

Developer <-> Publisher

Marketing

PR

Publisher

VP of Product Development

Executive Producer

Senior Producer

Producer

Associate Producer

Assistant Producer

Production Assistant

Developer

Producer ⟷ ?

Developer <-> Publisher

Most internal problems of this industry
come from the developer publisher relationship

Thats why most publishers have huge internal
Development departments now

Which means large overhead, meaning they must perform

EA had 22 titles selling over a million last year
Is the rest able to follow?

PC and Console Market today

Questions?

Suggestions?

Discussions?

Wishes?