Development of Games

Lecture 21

Industry of Games

The Videogame Industry--

"Was created by high potential kids who were bored with lectures in school."

Bing Gordon, EA

Game Industry 2005

- PC game sales?
  - PC Game dollar sales down 14% from last year. (1.1B in 2004, 953M in 2005)
  - PC Game unit sales down 19% from last year (47M units in 2004, 38M units in 2005)
- Console/Handheld sales?
  - Slightly up: 6% from 2004. ($9.9B in 2004, $10.5B in 2005)
- Console Game Sales?
  - Down 12% from 2004!
- Handheld game sales?
  - Up! 42% higher than 2004 – a total of $1.4B!
- Most popular handheld of 2005, in terms of games sold?
  - The GBA! 64% of units sold, and 52% of dollar sales.

<u>Measuring value time, not boxes or tickets</u>
Top 10 US Paid Media 2004

Club Pogo	225M hrs
Madden NFL 05	180M hrs
Everquest	170M hrs
(Google search)	170M hrs
Grand Theft SA	160M hrs
Halo 2	150M hrs
Sopranos 5th season	130M hrs
Shrek 2 movie	126m hrs
Spiderman 2 movie	113m hrs
Passion of Christ	110M hrs
ESPN NFL 2K 2005	100M hrs

Source: various, internal estimates

Top Selling Videogames of 2005 Total US Units

#	System	Title	Publisher	Date	ARP
10.	PS2	Lego Star Wars	Eidos	3/05	$37
9.	PS2	NBA Live 06	EA	9/05	$44
8.	PS2	SW3: Rev. of the Sith	LucasArts	5/05	$47
7.	PS2	MVP Baseball 2005	EA	2/05	$29
6.	PS2	SW: Battlefront II	LucasArts	11/05	$47
5.	PS2	NCAA Football 06	EA	7/05	$48
4.	XBX	Madden NFL 06	EA	8/05	$47
3.	PS2	Gran Turismo 4	Sony	2/05	$49
2.	GBA	Pokemon Emerald	Nintendo	4/05	$34
1.	PS2	Madden NFL 06	EA	8/05	$46

Top Selling Videogames of 2004 Total US Units

| System	Title	Publisher	Date	ARP
10. XBOX	ESPN NFL 2K5	Take 2	7/04	$19
9. XBOX	Halo	Microsoft	11/01	$29
8. PS2	Spider-Man 2	Activision	6/04	$43
7. PS2	NBA Live 2005	EA	9/04	$33
6. GBA	Pokemon Firered	Nintendo	9/04	$32
5. PS2	Need for speed 2	EA	11/04	$48
4. PS2	ESPN NFL 2K5	Take 2	7/04	$19
3. PS2	Madden NFL 2K5	EA	8/04	$49
2. XBOX	Halo 2	Microsoft	Nov	$52
1. PS2	GTA: San Andreas	Take 2	Oct	$49

Top Selling Games of 2003 (US)

- 20: Mario Bros 3 / Mario 4 (GBA)
- 19: The Getaway (PS2)
- 18: NBA Street 2 (PS2)
- 17: Grand Theft Auto 3 (PS2)
- 16: Socom II: Navy Seals (PS2)
- 15: NBA Live 2004 (PS2)
- 14: Final Fantasy X2 (PS2)
- 13: True Crime: Streets of LA (PS2)
- 12: Halo (XBX)
- 11: NCAA Football 2004 (PS2)

- 10: Medal of Honor Rising Sun (PS2)
- 9: Enter the Matrix (PS2)
- 8: Tony Hawk Underground (PS2)
- 7: Mario Kart: Double Dash (GCN)
- 6: Grand Theft Auto: Vice City (PS2)
- 5: Zelda: The Wind Waker (GCN)
- 4: Need for Speed: Underground (PS2)
- 3: Pokemon Sapphire (GBA)
- 2: Pokemon Ruby (GBA)
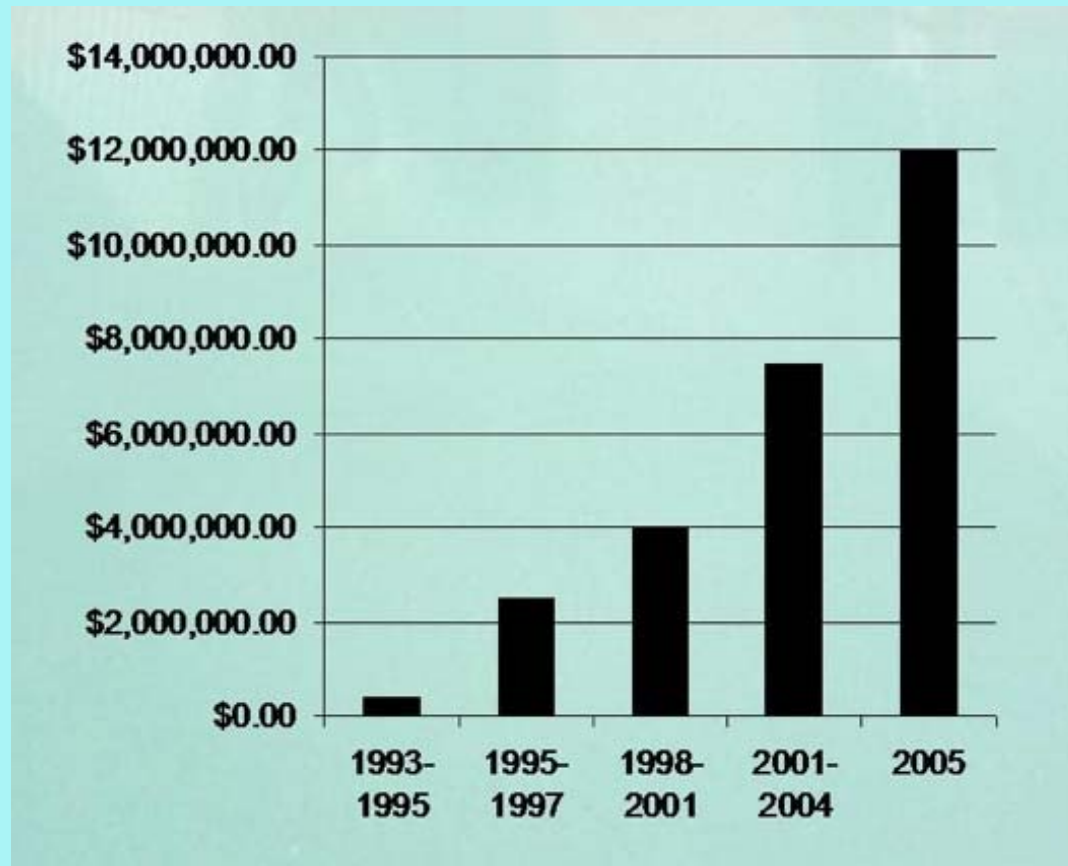- 1: Madden NFL 2004 (PS2)

Top Selling Games of 2002 (US)

- 10 GCN: Super Mario Sunshine
- 9 XBX: Halo
- 8 PS2: Kingdom Hearts
- 7 PS2: Spider-Man: The Movie
- 6 PS2: Medal Honor Frontline
- 5 PS2: Gran Turismo 3: A-Spec
- 4 GBA: Super Mario Advance 2
- 3 PS2: Madden NFL 2003
- 2 PS2: Grand Theft Auto 3
- 1 PS2: Grand Theft Auto: Vice City
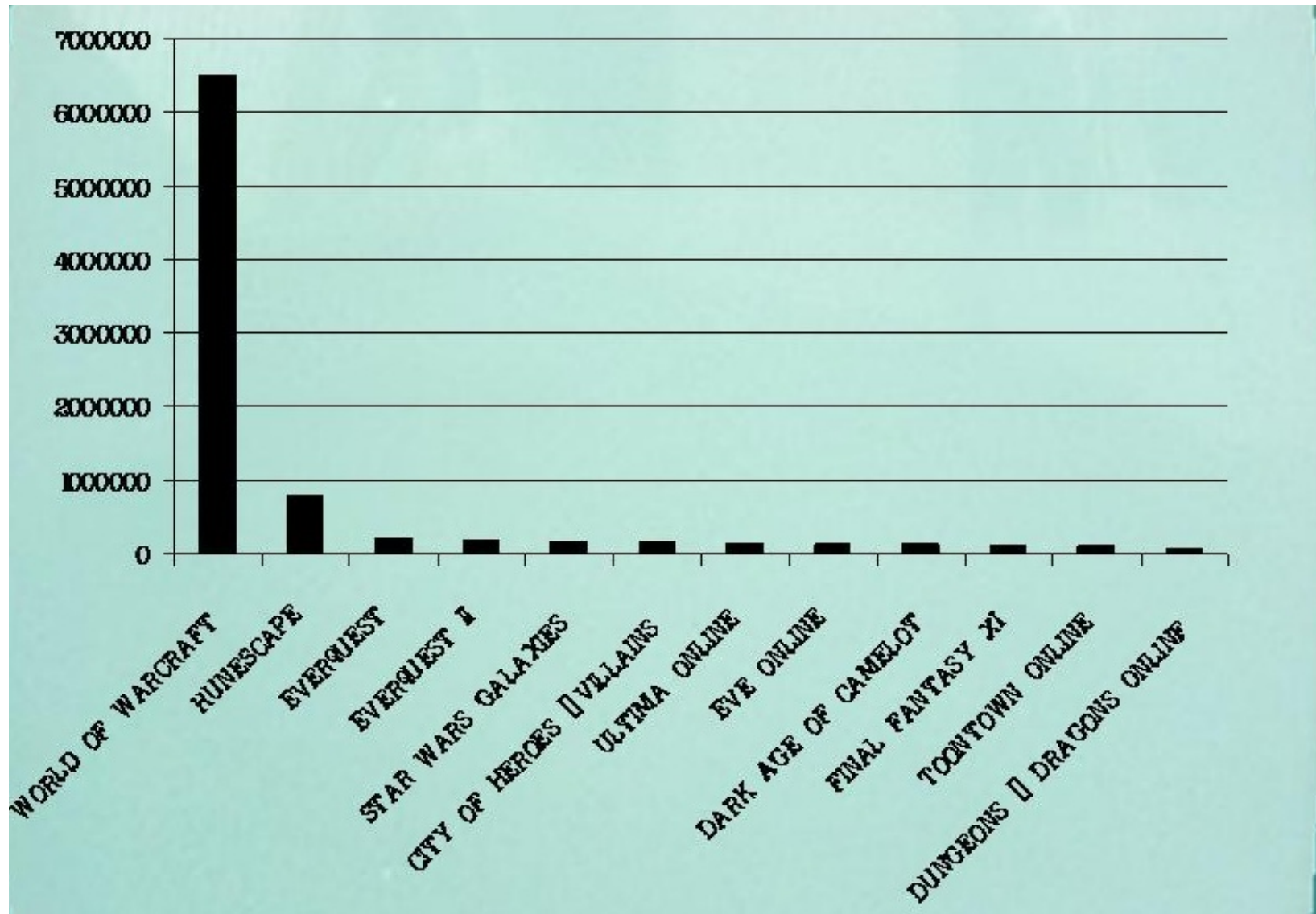
Game Budgets Over Time

Budgets have gone up by a factor of 22.

Game Industry Realities

- Hitting a wall on finances
- Hits are getting rarer
- Genre killer games
- End up selling to the same group of people (e.g., the Sims)
- Game sequels--here to stay
- Targeting of mainstream hardcore gamers (if you like FPS, best time to be a gamer!)
- Limited opportunity for developers who want to try something new (experimental titles)
- Not seeing alternative revenue streams
- Movie-style alternative financing won't materialize for the average project
- Distribution channels are in upheaval
- See a shakeout of the current Big Development publishers

Opportunities in the Game Industry

- Notion of the infinite shelf (Net flix, Amazon, casual game sites)
- Relationship between the producer and the player. Increased importance of such elements as Community management, "rock star" designers, fan boys
- Digital distribution vs. retail
- Life style marketing
- Niche driven titles--not aimed at the core gamer
- Consumable, disposal games
- Design for online upfront
  - persistent states for identity, ranking, rating
  - Design for multiplayer game play
  - Shared profiles, friend's lists, etc.
- Rise of MMO games (e.g., Neopets)
- Indie MMO publishers running without name publishers (social worlds)
- Aggregation of all types (e.g., Live Arcade, casual game sites)
- Media companies incorporating online elements
- Web-based publishers

New game categories over time

- 1981: Dungeons and Dragons
- 1982: Flight Sims
- 1986: Chess
- 1988: Sports simulations
- 1989: God games
- 1993: Shooters
- 1994: Interactive movies

- 1997: MMO's
- 1999: Dance games
- 2000: Dollhouse games
- 2001: Living city games
- 2002: "Casual" games
- 2005: Pet games
- 2005: Music games

Team Structure

- 1970s - 1 person could create the entire project
  - Yesterday: Games were smaller 8 kilobytes
    - Space Invaders (1978) was four kilobytes including sound and art
    - Astroids (1979) was 8 kilobytes
    - Pac-Man (1982) was 28 kilobytes
  - Today: hundreds of megabytes of storage
    - More like movie production - with movie budgets!

Team Components/Members

- Studio Manager
- Executive Producers
- Producers
- Project Managers
- Program Managers
- Programmers
- Creative Director
- Game Artist Play/Storyboarders
- Level Designers
- Illustrators
- Graphic Designers
- Animators
- MoCap Actors
- Networkers
- Multi-player Designers
- Social Architects
- Web developers

- Writers
- Community Director
- Audio
- Audio Design
- Dialog
- Voice Talent
- AI developers
- Software architects
- Programmers
- Play testers
- Marketers
- Geopolitical
- PR
- Event Planners
- Technical Writers

The three ages of gamers

- Pre-teens: physical mastery and control
  - "My Mom and teachers always tell me what to do."

- Teenagers: role-playing
  - MySpace and virtual worlds.

- Adults: "self-improvement"
  - "It's not a game, dear, it's like going to flight school."

Hard Core Vs. Casual Gamers

Hard Core Gamer

- Buy and play many games
- Enjoy longer play sessions—regularly play for long periods of time
- Enjoy challenge, progression, and game mastery
- Tolerate a high dimensionality of control
- See game play as a lifestyle preference and talking about games is a social component of their lives

Casual Gamer

- Buy fewer games, buy popular games, or play games recommended to them (by hardcore friends)
- Enjoy shorter play sessions—play in short bursts
- Prefer having fun, or immersing themselves in an atmospheric experience
- Generally require a low dimensionality of control (e.g., driving games)

The rest of the world

Game Audiences

- Hardcore
- Casual
- Other Player Types
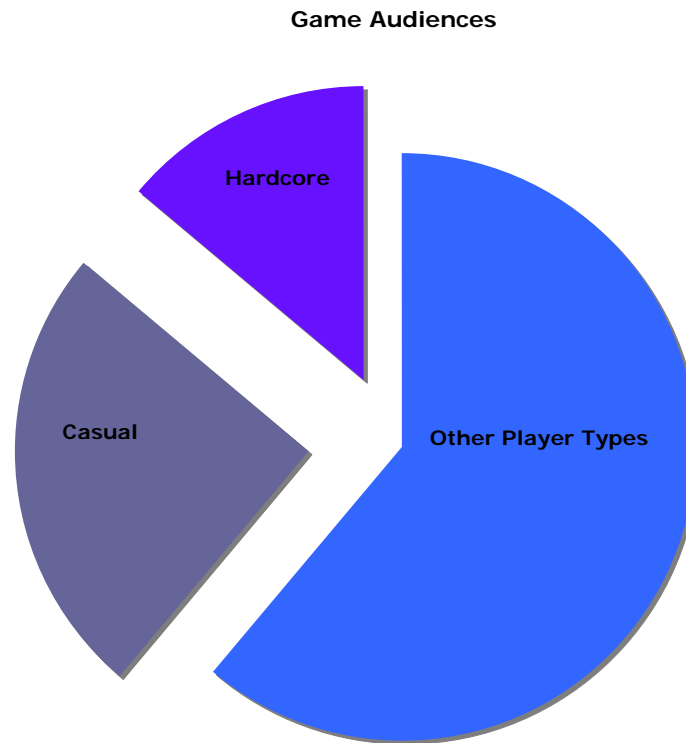
Publishers vs. Developers

- Not all games are created in-house
  - E.g., Baldur's Gate—created by BioWare but sold by Interplay
- Publisher Role:
  - finance, market and distribute the title
  - looks to developers for new titles
  - Typically give the developer an advance against royalties which is used by the developer to pay team members, cover overhead and subcontractor work.
  - Some publishers also develop games internally (EA, Nintendo)
  - Some developers are wholly owned by publishers

Roles and Responsibilities

- PUBLISHER
  - Chooses which titles to produce
  - Finances titles
  - Provides QA testing
  - Markets titles
  - Distributes titles

- DEVELOPER
  - Pitches creative ideas and demos to publishers
  - Uses money from publishers to produce titles (game design, programming, art, audio, etc.)

Examples

- PUBLISHER
  - EA
  - Activision
  - Nintendo
  - Sony
  - Microsoft
  - Take Two
  - Disney
  - Vivendi
  - Atari
  - Eidos
  - Real

- DEVELOPERS
  - Blizzard
  - Rockstar
  - Ensemble Studios
  - Westwood Studies
  - Naughty Dog Entertainment
  - Ion Storm
  - Shiny Entertainment
  - Bioware
  - Big Huge Games
  - Gas Powered Games
  - PopCap
  - Gamehouse
  - Maxis
  - Epic Games
  - Lionhead Studioes
  - Digital Illusions

Stages of Development

- Concept Phase (month 1)
  - The Game Vision
  - The proposal
  - The pitch
  - Project plan, budget
  - Contract
- Pre-production Phase (months 2-6)
  - Prototype or playable level
  - Technology specification
  - Design Doc
- Production Phase (Months 7-22)
  - Assets
  - Levels
  - Alpha Code
- QA Phase (Months 23-24)
  - Gold
  - Code
- Launch

If Games are the Coffee, are Virtual Worlds the next Coffee Shops

What is a Virtual World?

Characteristics of MMOs?

- Virtual Worlds are graphical two dimensional or three dimension spaces

- Allow individuals , through their self-created digital characters or "avatars" to interact not only in the world, but with other participants.

- Persistent social and material worlds, loosely structured by open-ended narratives, where players are largely free to do as they please.

- Combination of escapist fantasy and emergent social realism

- Technically they are the latest in a progression of social games that originated with paper-and-pencil fantasy games.

- Heavily played (over 20 hours/week)

Richard Bartle

Virtual worlds are implemented by a computer (or network of computers) that simulates an environment. Some--but not all--the entities in this environment act under the direct control of individual people. Because several such people can affect the same environment simultaneously, the world is said to shared or multi-user. The environment continues to exist and to develop internally (at least to some degrees) even when there are no people interacting with it; this means it is persistent.
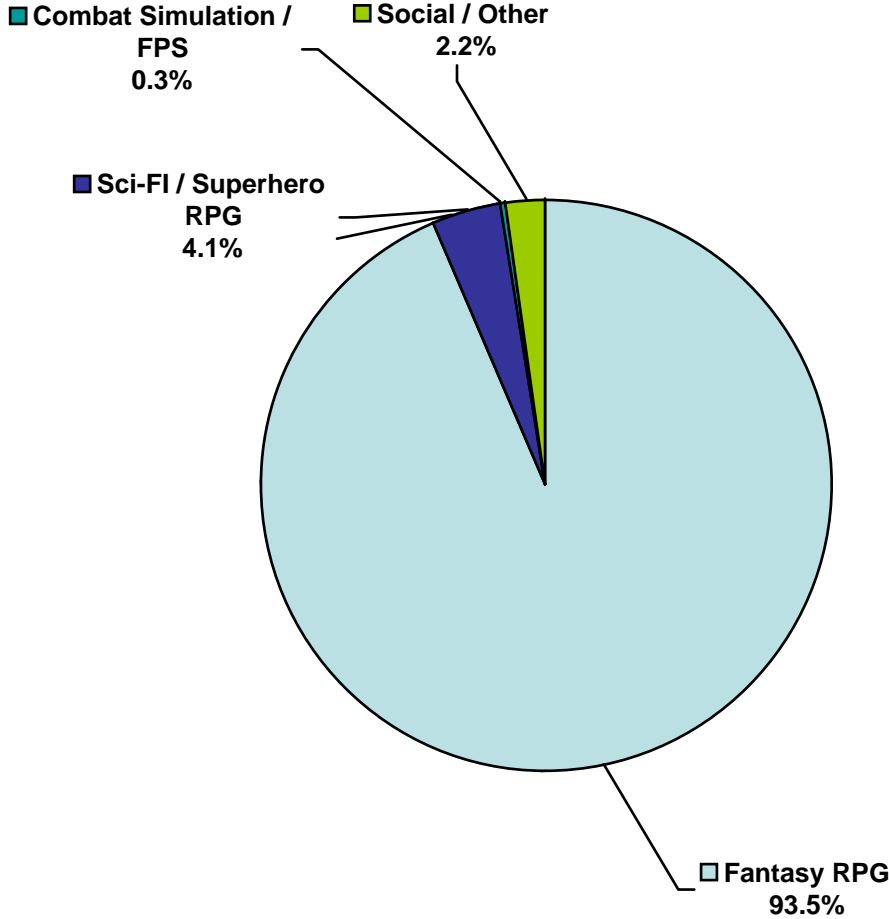
Characteristics of Virtual Worlds

- Shared Space: the world allows many users to participate at once.

- Graphical User Interface: the world depicts space visually, ranging in style from 2D "cartoon" imagery to more immersive 3D environments.

- Immediacy: interaction takes place in real time.

- Interactivity: the world allows users to alter, develop, build, or submit customized content.

- Persistence: the world's existence continues regardless of whether individual users are logged in.

- Socialization/Community: the world allows and encourages the formation of in-world social groups like teams, guilds, clubs, cliques, housemates, neighborhoods, etc.
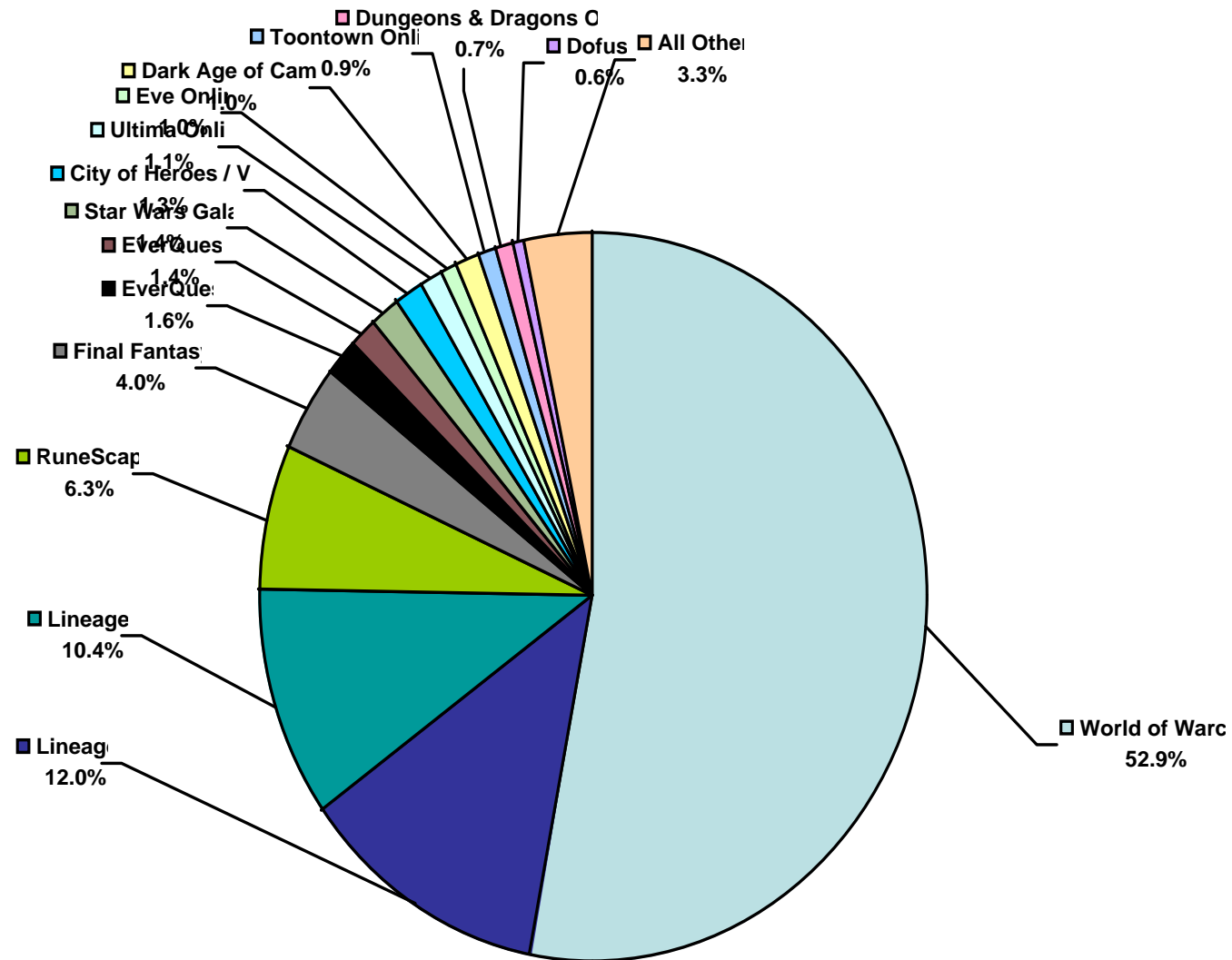
Gaming Worlds

- Part of the history of alternative worlds found in science fiction and fantasy literature (e.g., The Hobbit, Tolkien, etc.).

MMOG Subscriptions Market Share By Genre - June 2006

- ☐ Combat Simulation / FPS 0.3%
- ☐ Social / Other 2.2%
- ☐ Sci-FI / Superhero RPG 4.1%
- ☐ Fantasy RPG 93.5%

MMOP Subscriptions Market Share - June 2006

- Dungeons & Dragons O 0.7%
- Toontown Onli 0.9%
- Dofus 0.6%
- All Other 3.3%
- Dark Age of Cam 1.0%
- Eve Onlin 1.0%
- Ultima Onli 1.1%
- City of Heroes / V 1.3%
- Star Wars Gala 1.4%
- EverQues 1.4%
- EverQue 1.6%
- Final Fantas 4.0%
- RuneScap 6.3%
- Lineage 10.4%
- Lineag 12.0%
- World of Warc 52.9%

Social Worlds

- Social virtual worlds are a particular subset of massively multiplayer online spaces that focus on social interaction rather than traditional gaming activities. Most of them allow users to customize their experience by decorating a personalized space or running their own events. Settings tend to be realistic, modern environments.

Second Life Stats

- Today in Second Life people are spending close to 7m dollars in mostly digital goods and services per month
- 19,000 landowners
- 80 sq miles, about as big as Amsterdam
- 20 million objects
- 20 terabytes of user created content
- 13 teraflops of simulation
- 3500 server machines
- median age is over 30
- about half is international and half is USA
- Recently the international figure has been accelerating rapidly
- almost gender balanced, early adopters but not necessarily a programmer or technologists
- 36% of signups are women
- women use Second Life so much more than men do, to the degree that 44% of the usage hours are by women
- The majority of people doesn't get through the first 4 hour learning curve; but once they're through, they basically never leave

Differences between Social and Game Worlds

Game Worlds

- Started with a narrative tradition
- Focus on a singular fictional theme with common conventions such as character-focused avatars, progression through an interactive narrative storyline and a series of competitive events.
- Settings typically medieval, literary, fantasy or science fiction settings.
- Goal--Kick ass

Social Worlds

- Use gaming technology but not a game.
- Presenting a more open-ended experience. Visitors not necessarily there to win or play a game, but to socialize with others.
- Play influenced by pop culture and consumer culture
- Based on modern-day realistic environments
- Goals - chat, card games, socialize, dollhouse
- Avatars more realistic. Typically look like extensions of self in the real world. Identity through avatars important to the experience.
- More commercial oriented (product placement, adverworlds, sponsored promotions, in-world advertising)
- More women involved

The Third Place

The Next Third Place

MMOs and the 3rd Place

- Provide spaces for social interaction and relationships beyond the workplace (or school) and home, such virtual environments have the potential to function as new (albeit digital) third places similar to pubs, coffee shops, and other hangouts.

- They are social environments often requiring collaboration, for successful play. Some people enjoy playing along or in a "pseudo-social" fashion.

Types of Virtual Worlds

- Commercial Gaming
- Socializing / Online Community Building
- Education
- Political Expression
- Military

Examples of Social Worlds

- Club Penguin
- Cyworld
- Gaia
- Habbo Hotel
- Coke Studios

Examples of Game Worlds

- World of Warcraft (WoW)
- Puzzle Pirate
- Runescape
- Guild War
- Lineage
- Everquest
- Ultima
- Toontown

Hybrid Worlds

- Second Life
- The Sims