

## Chapter 6 – Games: Technology, Industry, and Culture

### Game On

- Before, games mostly purchased as
  - **standalone package** and played on **consoles attached to TV** (video games)
  - online **multiplayer games** (massive multiplayer online games or MMOGs) played on **personal computers** with broadband connectivity and accessed on a **subscription** basis
- Recently, online and mobile games outgrowing former “packaged-goods” type of game
- Kline (2003): interactive games are “the ‘ideal commodity’ of a post-Fordist/postmodern/promotional capitalism – an artifact within which converge a series of the most important production techniques, marketing strategies and cultural practices of an era”
- Games industry
  - direct spinoffs for
    - technological innovation
    - computer processing
    - demand for broadband services
    - mobile telecommunications
  - indirect spinoffs for
    - real estate and travel
    - military training
    - health care
    - intelligence testing
    - corporate training
- “serious games”
  - Blend of game technology and mechanics with educational, research, and training objectives

### Games History

- Early video games developed by military-industrial-academic complex, which also started the Internet
- Researchers involved in US nuclear program at MIT Artificial Intelligence unit created games in their spare time
  - Spacewar (completed in 1962)
  - Tennis for Two (first created in 1958, patented in 1968 by Ralph Baer)
- Pong (released by Atari in 1972)
- Space Invaders (released by Midway in 1978)
- Arcade-based games
  - Coin-operated machines in public places
- Console-based games
  - Played at home through the television
- Mid 1980s - too many poor-quality games, Atari incurred massive losses for its parent company, Time Warner
- Second half of 1980s – dominated by Nintendo
- 1985 – launch of Nintendo Entertainment System (NES)
  - Super Mario Bros – grossed USD \$500 million by 1990
- Nintendo games dramatically improved pacing, visuals, sound, and dynamism
  - Greatly enhanced the experience of play

- Nintendo developed a way to outsource the development of games content to third parties while still retaining quality control over the games through strict licensing procedures
  - Separating game engine from game content
  - Developed a sophisticated marketing strategy
    - Gave information and support to players
    - Nurtured a gaming subculture
    - Gain player feedback about the games
- Super Mario brand provided the basis for spinoffs into other media
  - Successful children's television cartoon
  - Less successful Hollywood film
  - Merchandising in the form of tshirts, comic books, removable tattoos, lunch boxes, etc
- 1990s – entry of Sega into the games environment with 16-bit Genesis console
  - micro-processing capability to generate bigger animated characters, more detailed backgrounds, faster play, richer and more elaborate sound effects and music
  - Sonic the Hedgehog – flagship Sega game
  - Developed riskier content
    - Street Fighter
    - Mortal Kombat
- Nintendo created GameBoy
- 1994 – Sony created PlayStation
- Computer-based gaming
  - Wolfenstein (1991)
  - Myst (1993)
  - Doom (1994)
  - Quake (1995)
- Sony – PlayStation 2 (PS2) in 1999
  - PlayStation 3 (PS3) in 2006
- Nintendo – GameCube (2001)
  - Wii (2006)
  - Wii U (2012)
- Microsoft – Xbox (2001)
  - Xbox 360 (2005)
- Grand Theft Auto V (GTA 5) grossed over \$1 billion in one day
- Indie studio games
  - Indiegogo.com
  - Kickstarter.com
  - Crowdfunding indie games

### **The Games Industry: Integrating and Disintegrating the Value Chain**

Sawyer (2002) – games-industry value chain has 6 distinct but connected layers:

1. Capital and publishing layer
  - a. Involved in investing in new titles, seeking returns through licensing for those investments
2. Product and talent layer
  - a. Developers, designers, artists
  - b. May be working under individual contracts or as part of in-house development teams
3. Production and tools layer

- a. Generates content production tools, game development middleware, customizable game engines, production management tools
  4. Distribution layer or the publishing industry
    - a. Involved in generating and marketing catalogues of games for retail and online distribution
  5. Hardware layer or the providers of the underlying platform
    - a. Console-based, personal computer-based, or accessed through new generation mobile devices
  6. End-user layer or the users/players of the games
- **Modding** – modification of game content by online user communities