# A Brief History of Computer Games - Part 2

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## **Overview**

- 2011-2012 (paper is pretty old)
- Mobile gaming
- The variety of games
- Tennis: an example
- Graphics
  - 3D
  - Realism
- Interaction Devices
- Demographics



## 2011-2012

- Sony Move & Microsoft Kinect
- Wii U announced, Xbox & Playstation no announcement
- Mobile gaming sees surge over last years
- Nintendo 3DS released- 3d is the hype of the industry



# Mobile gaming

- Angry Birds seen as the 'lodestar' of mobile games
- Android and iOS dominant, but Microsoft 8 is coming!
- Mobile revenue sees 50% YoY growth in the US
- Phones and tablets enable new types of interaction



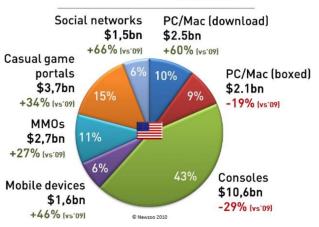




# **Range of games developed**

- Development budgets for AAA games have skyrocketed
- Platforms like App Store, Play Store & Steam also enable low-budget titles to be released
- A *lot* of different platforms



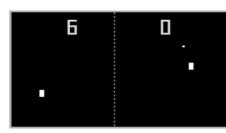


Total games spend 2010 – US \$ 24,700,000,000 | -2% (vs '09)

## **Tennis: an example of evolution**

• Graphics, AI, Storyline, Multiplayer, Interface & Control















# Graphics

- Moore's law has certainly helped
- From 192x160 to 1920x1280 pixels
- Smart tricks deployed early on
  - Sprites
  - Isometric projection
  - Parallax scrolling



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Sprite set for a character



Age of Empires 2 (1999)

Outrun (1986)

# **3D is going to be massive...?**

- 2011 saw the introduction of Nintendo 3DS
- Massive investments were being made in 3D-TVs
- The race to "full realism"





# **Realism is the selling point**

- Lots of effort on creating *real-looking* games
- *"Suspense of disbelief"* reality doesn't meet expectations
- Specialized hardware accelerated graphic realism





Wolfenstein (1981)

Battlefield 3 (2011)

#### **Interaction devices**

- Joysticks for consoles, Keyboard & Mouse for PCs, etc.
- Different games are suited for different interaction devices!





Evolution of Nintendo controllers

Specialized controllers

## **Interaction devices - quiz**

• Which controllers are suited for which games?











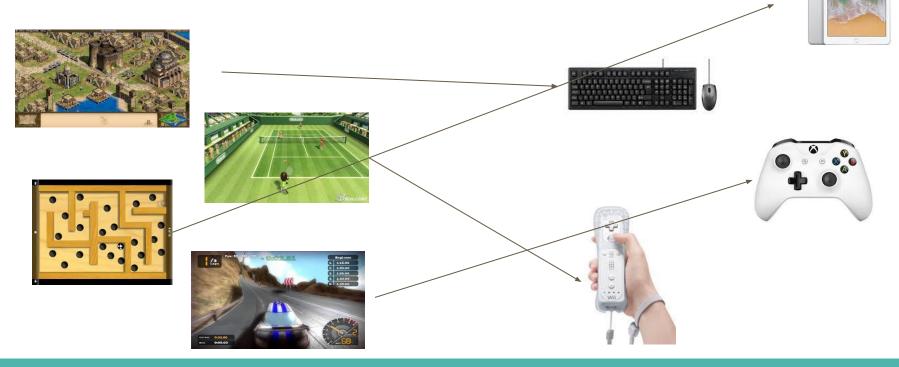






## **Interaction devices - quiz**

• Which controllers are suited for which games?

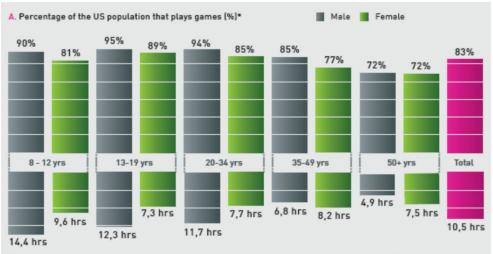


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# **Demographics**

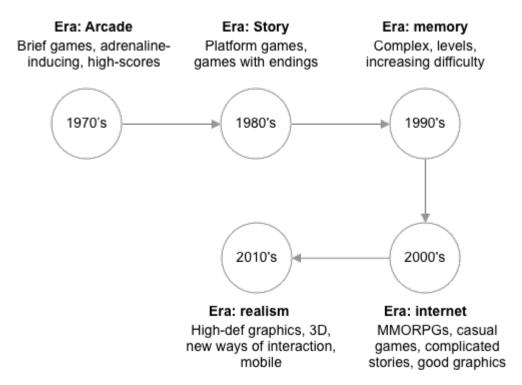
- From niche to mainstream
- Variety in games has spawned variety in demographics





B. Average number of hours spent per week on games for part of population that plays games (hours/week)\*\*

# Wrap up: changes in gameplay



## Wrap up: changes in business

