

## Lecture 28

# The Industry

# A Changing Industry

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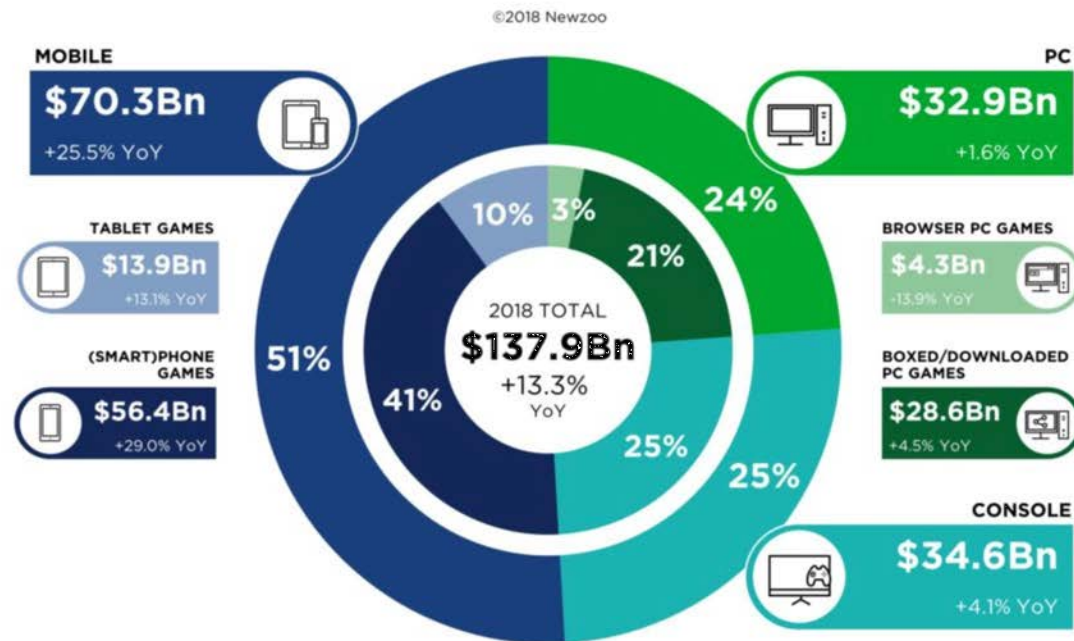
- The game industry is rapidly changing
  - AAA studios are contracting/cutting back
  - MOBA and mobile studios have plateaued
  - Battle Royale starting to peter out some
- It is harder for Indie Games to break out
  - Indie sales peaked around 2014 or so
  - Now supply has far out-stripped demand
- **Focus:** Understanding the trade-offs here

# Market by Platform



## 2018 GLOBAL GAMES MARKET

PER DEVICE & SEGMENT WITH YEAR-ON-YEAR GROWTH RATES



Source: ©Newzoo | April 2018 Quarterly Update | Global Games Market Report  
newzoo.com/globalgamesreport

# Market by Platform



## 2012-2021 GLOBAL GAMES MARKET

REVENUES PER SEGMENT 2012-2021 WITH COMPOUND ANNUAL GROWTH RATES

- Mobile Games
- PC Games
- Console Games



Source: ©Newzoo | April 2018 Quarterly Update | Global Games Market Report  
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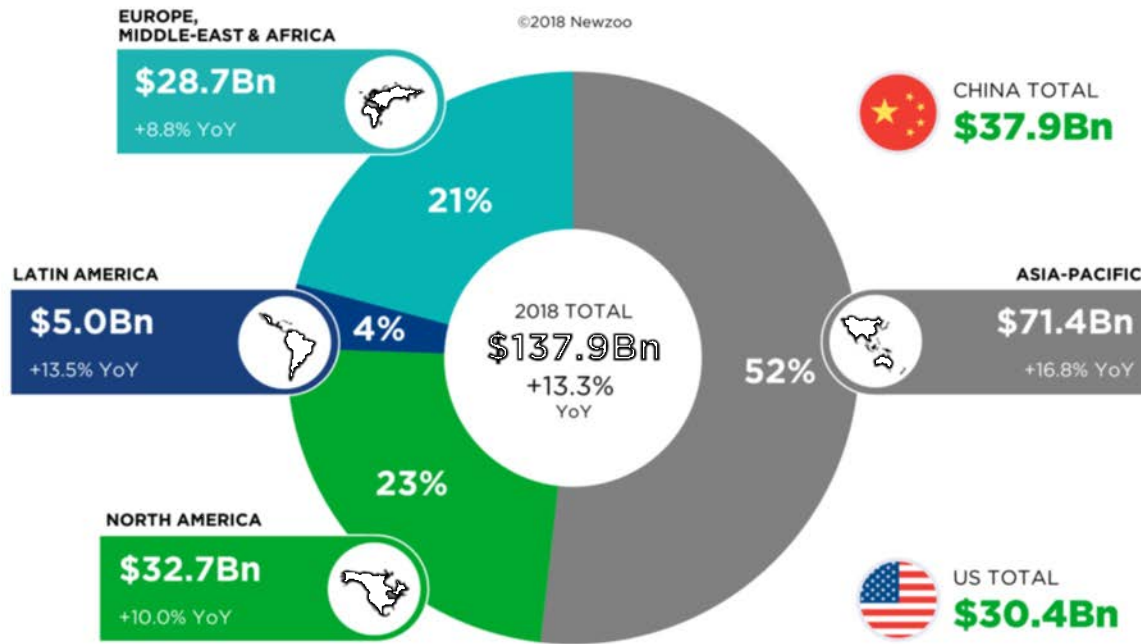


# Market by Region



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# Classic Industry Roles

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- **Developers** make the games
  - Core studio of salaried people
  - Hire freelancers as deadlines approach
- **Publishers** distribute the games
  - Get the games into the retail chain
  - Advertise the game to customers
  - **Give developers advances to pay salaries**
- **Console Developers** make game platforms
  - Publishers license to publish games for platform
  - In AAA space, limits profit on a \$60 game to \$30

# Talk Outline

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- **Types of Developers**
  - How they publish; how they are funded
  - Limited to North America
- **Breaking in to the Industry**
  - Some sobering facts
  - How to prepare yourself
- **Going it Alone**
  - The modern start-up culture
  - Important indie resources



# First Party Developers



- Make **hardware platforms**
  - In-house studio for platform
  - Help drive the platform
- Often make “launch” titles





# First Party Developers



- **Nintendo:** Mario
- **Sony:** God of War
- **Microsoft:** Halo
  - Microsoft strategy changes



# 3rd Party Developer-Publishers



- Large public corporations
  - Many development studios
  - Multiplatform development
  - Many concurrent projects
- **Advantage:** deep pockets
  - Constantly shipping titles
  - Current titles bring revenue
  - Use to fund new projects
  - Can support *large* teams



# 3rd Party Developer-Publishers



- **Activision-Blizzard**
  - Modern Warfare, WoW
- **EA**
  - Madden, Battlefield
- **Ubisoft**
  - Assassin's Creed
- **Take-Two**
  - Grand Theft Auto

# 3rd Party Developer-Publishers



- **Activision-Blizzard**

- Bought by Microsoft!

- **EA**

- Madden, Battlefield

- **Ubisoft**

- Assassin's Creed

- **Take-Two**

- Grand Theft Auto

# Independent Developers



- Mainly work on other IP
  - Lots of ports/some licenses
  - “Developers-for-Hire”
  - Building cash for own IP
- Often work in parallel
  - X days/week on contract
  - Y days/week on own IP
  - But keep finances *separate!*
- Some financed startups
  - But not really anymore





# Independent Developers



- **Moon Studios**

- Ori and the Blind Forest

- **Playdead**

- Limbo, Inside

- **Capybara Games**

- Below, Super Brothers

- **Finji**

- Night in the Woods



# Established Independent Developers



- Work with major publishers
  - Both first and third party
  - Often get acquired by them
- Or publish non-traditionally
  - Digital Distribution (Steam)
  - Or served online (MOBAs)
- Few concurrent projects
  - Publishers control money
  - A game away from closing
- Hardcore credibility



# Established Independent Developers



- **Bethesda**
  - Fallout 3, Skyrim
- **Bungie**
  - Halo, Destiny
- **Respawn**
  - Titanfall
- **Riot**
  - League of Legends



# Established Independent Developers



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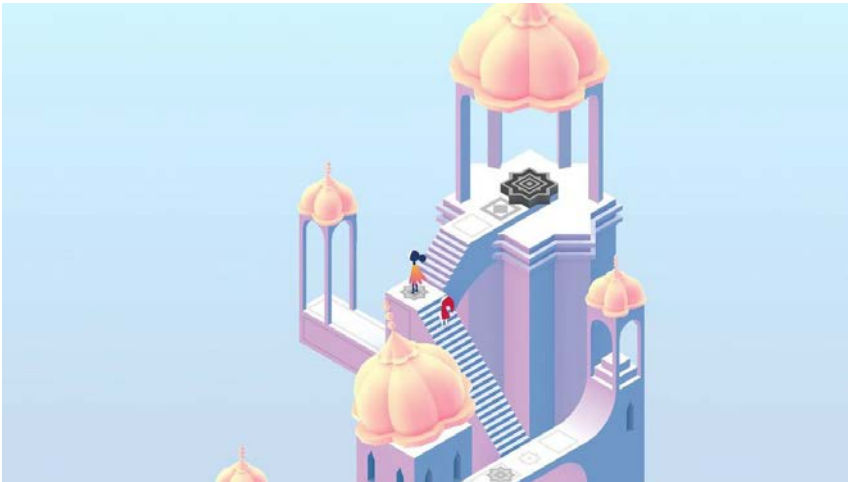
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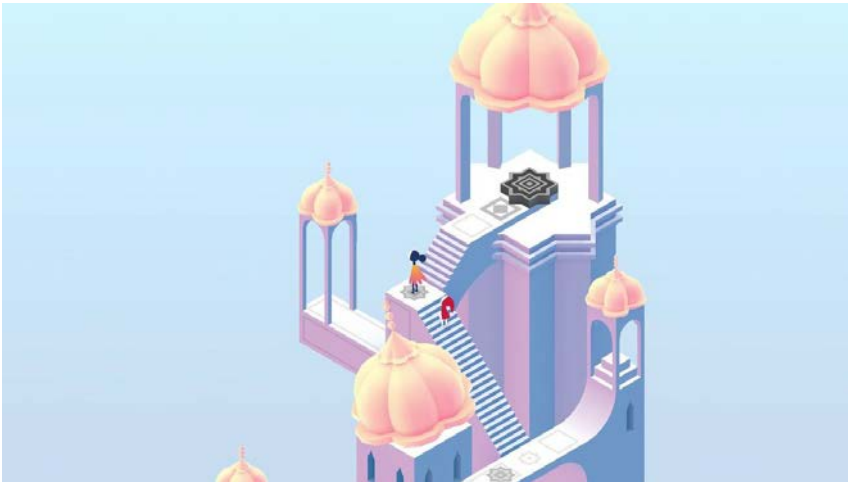


# Mobile Developer/Publishers



- Make games very rapidly
  - Smaller games
  - Smaller teams (<10)
  - Short development cycles
- But sometimes take longer
  - Identify IP as a major hit
  - Use other titles to fund it
- **Apple Arcade** is a big deal
  - Helps with revenue model
  - Helps game get discovered

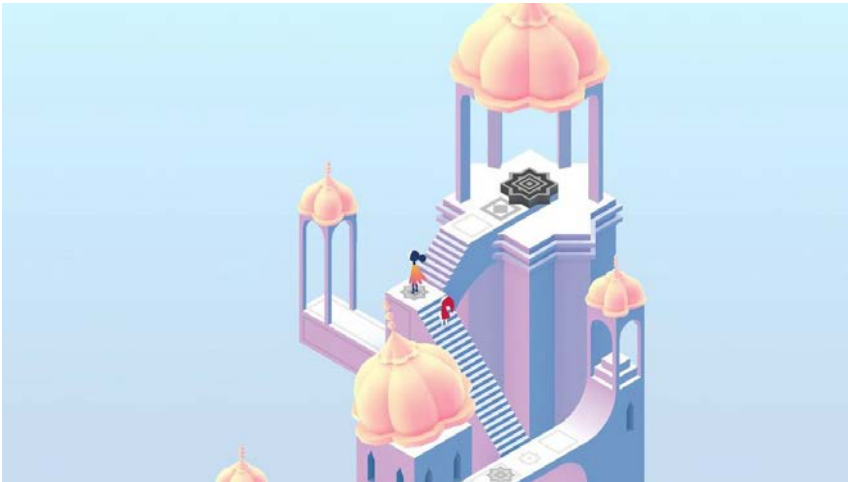
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But often requires  
a real publisher

# Mobile Developer/Publishers



- **Supercell**
  - Clash of Clans
- **Pocket Gems**
  - War Dragons, Episode
- **Niantic Labs**
  - Pokemon GO
- **Fireproof Games**
  - The Room Series
- And some **EA, Ubisoft**



# “Indie” Developers & Peeps at Computers



- Original Properties
  - Everything is your own IP
  - Often unusual gameplay
  - Similar to this course
- Very informal cultures
  - Entirely digital distribution
  - Get credibility at online
- Paycheck not guaranteed
  - Don't quit your day job
  - **Kickstarter?**

# “Indie” Developers & Peeps at Computers



- **Jonathon Blow**
  - Braid, Witness
- **Spiderweb Software**
  - Avernum, Geneforge
- **Zachtronics**
  - Opus Magnus, Exapunks
- **Pontoco**
  - Last Clockwinder
- **Many iOS Developers**



# “Indie” Developers & Peeps at Computers



- **Jonathon Blow**

- Braid, Witness

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Forge

Essentially “Start-Ups”

Opus Magnus, Exapunks

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- Last Clockwinder

- **Many iOS Developers**



# Hybrid Game Developers



- Mixes traditional and digital
  - Digital board game
  - Digital add-ons
  - Sometimes AR features
- Extension of mobile market
  - Typically mobile/tablet
  - Needs to be in obtrusive
- Overlooked but growing!
  - Often not part of job search
  - Need mobile experience



# Hybrid Game Developers



- **Asmodee**
  - Mansions of Madness
  - XCOM: The Board Game
  - KeyForged
- **Wizards of the Coast**
  - D&D Beyond
  - Magic Arena
- **JackBox Games**
  - Quiplash
  - Fibbage



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# Some Reality Checks

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- Do you *really* want to get into the industry?
  - Salaries are **MUCH** lower than industrial average
  - Crunch time = lots of unpaid overtime
  - AAA space is still shrinking (because of costs)
- Average “life span” of developer is 5 years
  - After that, promoted up or out
  - Says something about stress in industry
- Might be happier at Google, Microsoft, etc.

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  - Salaries are **MUCH** lower than industrial average
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- Average developer is 5 years
  - More likely a *job* than a *career*
  - After that, promoted up or out
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- Might be happier at Google, Microsoft, etc.

# On the Other Hand

- Some people love all this
  - Creative process > money
  - Would work hard anyway
- Top developers do well
  - Build up lots of experience
  - Leave to found own studio
  - **High profile kickstarters**
- But you must have **passion**
  - Too much competition now





# On the Other Hand

- Some people love all this

Until you get middle aged

- Top developers do well
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# More Reality Checks

---

- As with many jobs, intern experience is key
  - Work on a title between junior & senior year
- But internships are cutting back
  - EA used to be great at training ... **and collapsed in 2008**
  - Zynga hired their recruiting staff ... **and then collapsed**
  - Riot picked up the internship slack ... **and then over-hired**
- It is an incredibly **competitive landscape**
  - Lots of game programs with cheap talent
  - Application has to have a hook to get noticed

# More Reality Checks

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- As with many jobs, intern experience is key
  - Work on a title between junior & senior year
- But internships are cutting back
  - EA used to be great
  - **Epic** still seems to be hiring a lot
  - ... when collapsed
  - ... internship slack ... and then over-hired
- It is an incredibly **competitive landscape**
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# Internships: Established Studios

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- Search early in year with recruiting team
  - Application process is usually very competitive
  - Check the company website regularly
  - Starts **online** with later **site interview**
- The goal is to teach and train students
  - Structured learning environment to ease you in
  - Hopes you come on for full-time after graduation
  - In the past, would offer job at end of internship



# Internships: Indep. AAA Studios

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- Searches later in year with one, two recruiters
  - Positions are not advertised outside their site
  - Application process is usually much easier
- Goal is to get cheap labor to push a title to ship
  - You will get thrown into the mix immediately
  - Will be treated exactly like a full-time
  - Hands-on experience and credit for a shipped title
  - Future job and other factors depends on the studio

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[gamedevmap.com](http://gamedevmap.com)

# Preparing Yourself

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- Build **professional skills**
  - **Programmers**: C++, Objective C, Unity 3D
  - **Designers**: Maya, 3D Studio Max, Unity 3D
- Build a **portfolio**
  - Make lots of games (even outside of class)
  - Distribute them or take them to festivals
- Become an **expert** in related area
  - **Programmers**: graphics, AI, networking
  - **Designers**: UI design, animation, concept art

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# Becoming an Indie Developer

---

- You need a (somewhat) finished **game**
  - CS 4152 project (or an independent study)
  - Much more polished than just one semester
- You need a **publishing platform**
  - **App Store**: Acceptance is easy; marketing is hard
  - **Steam**: No longer different from App Store
- You need to **market** your game
  - Showcase your game at festivals
  - Reach out to the gaming press

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**You cannot ignore this!**

# Game Festivals

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- Similar to a film festival
  - Submit game for judging
  - A jury plays your game
  - Selects games for event
- **Goal:** Pre-launch hype
  - Get press to see your game
  - Release early builds to press
- **Used to be** really important
  - Key element of marketing
  - But less than social media
  - Still a way to get noticed

## Examples

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- Independent Game Festival
  - Extremely competitive
  - But has a student track
- Boston Indie Game Festival
  - Easier for east coast schools
  - Accepts more games
- IndieCade
  - Focuses on “arty” games
- Other lesser festivals

# Game Festivals

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## Examples

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But still useful for next slide...



# Alternative: Kessler Fellows

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- Internal Cornell award to help entrepreneurship
  - Funds your work at a start-up company
  - So you are a (legal) unpaid intern for company
  - But they have to agree to take you on
- The fellowship is very competitive
  - Have to prove that you are an entrepreneur
  - Start with indie route; leverage for fellowship
- **Example:** John Austin from *Gathering Sky*

# What About Kickstarter?

- Not for new developers!
  - Team with established record
  - Media with existing platform (e.g. webcomics)
  - Everyone else usually fails
- Failure has consequences
  - Known as the “Failed Kickstarter”
  - Kickstarter does not remove pages
  - Can recover, but need new project
- New developers need a “day job”



# Support Beyond CS/INFO 3152

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- **CS/INFO 4152**

- **Capstone course**: take more advanced courses
- Requires game to be more advanced in some way

- **CS 4999**

- Often sponsor two projects a semester
- Take competitive proposals at semester start

- **Digital Gaming Alliance**

- Student club to support game designers

# Useful CS and Info Courses

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- For programmers
  - CS 4620: Introduction to Computer Graphics
  - CS 5625: Interactive Computer Graphics
  - CS 4700: Foundations of Artificial Intelligence
  - CS 4758: Robot Learning
  - CS 5414: Distributed Computing
- For designers
  - Info 3450: Human Computer Interaction Design
  - Info 4400: Advanced HCI Design
  - And many more