Lecture 28

The Industry
A Changing Industry

• The game industry is rapidly changing
  • AAA studios are contracting/cutting back
  • MOBA and mobile studios have plateaued
  • Live services are failing more often

• 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

©2018 Newzoo

Mobile
- $70.3Bn
- +25.5% YoY

Tablet Games
- $13.9Bn
- +13.1% YoY

(Smart) Phone Games
- $56.4Bn
- +29.0% YoY

Browser PC Games
- $4.3Bn
- +13.9% YoY

Boxed/Downloaded PC Games
- $28.6Bn
- +4.5% YoY

Console
- $34.6Bn
- +4.1% YoY

2018 Total
- $137.9Bn
- +13.3% YoY

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

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

2018 GLOBAL GAMES MARKET
PER REGION WITH YEAR-ON-YEAR GROWTH RATES

EUROPE, MIDDLE-EAST & AFRICA
$28.7Bn
+8.8% YoY
21%

LATIN AMERICA
$5.0Bn
+13.5% YoY
4%

NORTH AMERICA
$32.7Bn
+10.0% YoY
23%

CHINA TOTAL
$37.9Bn
52%

ASIA-PACIFIC
$71.4Bn
+16.8% YoY

2018 TOTAL
$137.9Bn
+13.3% YoY

US TOTAL
$30.4Bn

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

- **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

• **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

Industry
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

- **Bethesda**
  - Bought by Microsoft!

- **Bungie**
  - Halo, Destiny

- **Respawn**
  - Titanfall

- **Riot**
  - League of Legends

Industry
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
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
  
  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
- Spiderweb Software
- Avernum, Geneforge
- Zachtronics
- Opus Magnus, Exapunks
- Pontoco
- Last Clockwinder
- Many iOS Developers

Essentially “Start-Ups”
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
Talk Outline

- **Types of Developers**
  - How they publish; how they are funded
  - Limited to North American

- **Breaking in to the Industry**
  - Some sobering facts
  - How to prepare yourself

- **Going it Alone**
  - The modern start-up culture
  - Important indie resources
Some Reality Checks

- 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.
Some Reality Checks

- 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 (partly due to indies)
- Average "life span" of developer is 5 years
- After that, promoted up or out
- Says something about stress in industry

- More likely a **job** than a **career**
- 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
  - Build up lots of experience
  - Leave to found own studio
  - **High profile kickstarters**
- But you must have **passion**
  - Too much competition now
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

• 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 ... 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
Internships: Established Studios

- 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

• 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
Internships: Indep. AAA Studios

- 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 be 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
Preparing Yourself

- **Build professional skills**
  - **Programmers**: C++, Unreal, 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
Talk Outline

• **Types of Developers**
  • How they publish; how they are funded
  • Limited to North American

• **Breaking in to the Industry**
  • Some sobering facts
  • How to prepare yourself

• **Going it Alone**
  • The modern start-up culture
  • Important indie resources
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
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

You cannot ignore this!
Game Festivals

- 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**

- 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

• 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

• 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

But still useful for next slide…
Alternative: Kessler Fellows

- 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

• **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

- 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