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
  • 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

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MOBILE
$70.3Bn
+25.5% YoY

TABLET GAMES
$13.9Bn
+13.1% YoY

(SMART)PHONE GAMES
$56.4Bn
+29.0% YoY

PC
$32.9Bn
+1.6% 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%
- **Asia-Pacific:** $71.4Bn, +16.8% YoY, 52%
- **China Total:** $37.9Bn
- **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
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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- **Riot**
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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
Mobile Developer/Publishers

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- **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
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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
  - KeyForge

- Wizards of the Coast
  - D&D Beyond
  - Magic Arena

- JackBox Games
  - Quiplash
  - Fibbage
Talk Outline

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• 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
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- 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

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- Epic still seems to be hiring a lot
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

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Preparing Yourself

- **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

- 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

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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
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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