



Bringing Console Development Practices Mobile

Lessons From My Cross-Platform Transition

CONFIDENTIAL

Ben Liu Background

- CEO of Pocket Gems
- Began career in multiplatform AAA console games:
Pandemic / Bioware, EA
- One of the earliest people who made the move from console to newer platforms



Ben Liu Background

- Saw mobile's potential to become greatest gaming platform of our lifetime
- First iPhone product manager for EA mobile shortly after IAP introduced on iPhone
- Pioneer in free to play at Playdom / Disney
- Joined Pocket Gems early on



Pocket Gems Today

- Headquartered in SF with 200 employees
- Backed by Sequoia Capital, profitable since launch in 2009
- Mission to become leading mobile entertainment company
- Recent project in development is Dragons, console-like game made for mobile



Industry Changes

Changes to Mobile Games

- Mobile games as we know them are dead
- Historically, game platforms have undergone three disruptive changes as they evolve
 - Better graphics quality
 - More players interested in deeper gameplay experiences
 - Rise of interconnected multiplayer
- Mobile games are just beginning this process today

Changes to PC/Console Games

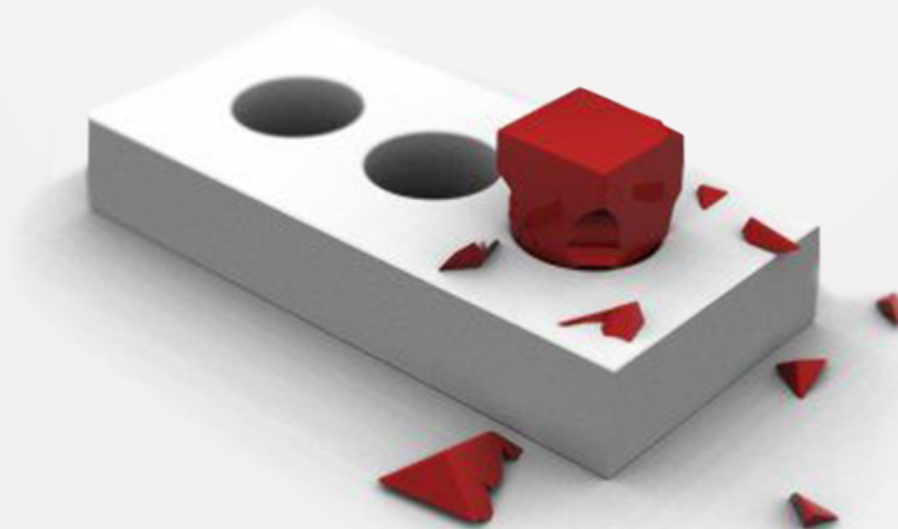
- PC/console games market continues to mature with many players shifting to new platforms
- Very high stakes - blockbuster or bust
- Similar to movies, risk and creativity face significant constraints

Biggest Opportunity in Games

- Greatest place for all developers to be right now is mobile
 - Top games make over \$1 billion in annual revenues
 - Create pure games that reach millions of people
 - Interdisciplinary, tightly focused teams
- Major opportunity to make mobile games that appeal to core gamers
 - Deep multiplayer
 - Action elements
 - RPG gameplay
 - Exploration
 - 3D graphics

Top Games of the Future

- Combine best parts of pc/console and mobile
 - Future successes will be about creating high quality experiences built explicitly for mobile
 - Ports from other platforms don't ever work



Top Games of the Future

- Best of Mobile
 - Continuously updated games-as-a-service
 - Pure, accessible, global gameplay
 - Real-time feedback and communication with players



Top Games of the Future

- Best of PC/Console
 - Beautiful art and production value
 - Deeper, richer gameplay experiences
 - Play with other people



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What We Can Learn From One Another

Issues for Mobile Developers

- Mobile developers historically have operated under rapid development cycles meant to get to market quickly
 - Can lead to shallow products
 - Can lead to focus on monetization over fun
- PC/console talent historically hasn't been very interested in mobile games
- Combination of data availability and internet roots can make it is easy to prioritize incremental improvements over innovation and fun

Issues for PC/Console Developers

- Free-to-play games are all about breaking down boundaries between function versus specialization
- Mobile pace-of-change and games-as-a-service thinking is MUCH MUCH faster than the console cycle
- Server engineering talent is critical

Pocket Gems Historic Strengths

- Games-as-a-service talent and technology
- Ability to develop new types of pure, accessible, global gameplay, especially new genres
- Real-time feedback and communication with players

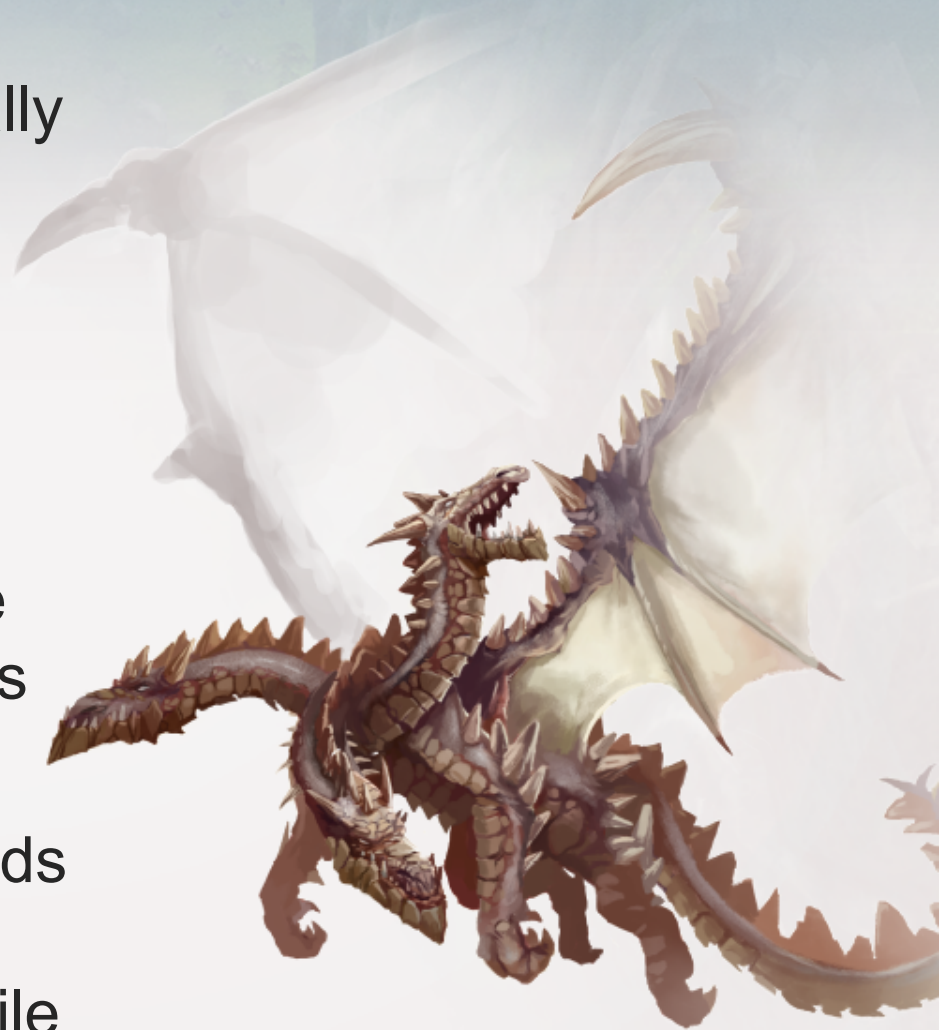
How We Changed Along the Way

Best Practices from PC/Console Games

- **Lesson #1: World-class craftspeople**
- Lesson #2: Art quality and polish
- Lesson #3: Prototype-driven development model
- Lesson #4: Design vision

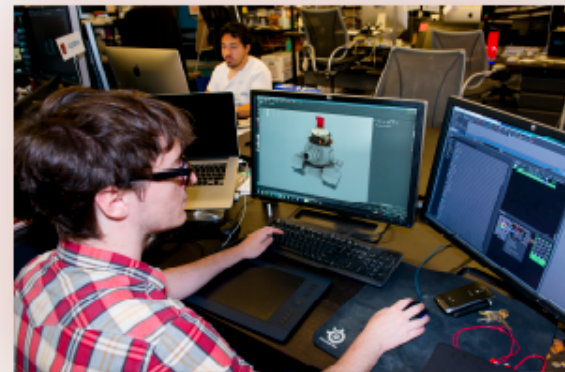
Historical Talent Comparison

- Mobile companies traditionally consists of startup and web talent
- PC/Console companies traditionally based on craftspeople who apprentice and from multiple ship cycles
- Success in the future depends on adding the right craftspeople to base of mobile talent



Lesson #1: World-Class Craftspeople

- Discipline experts can dramatically increase quality and decrease development time in art, 3D graphics, and technical game design
- Recruiting talent requires finding entrepreneurial individuals (and heavy involvement from senior staff)



Lesson #1: World-Class Craftspeople

- Key selling points
 - Back to early days of games . . . where everyone understands the game and has a role in design
 - Ability to get to market quickly with pure gameplay
 - Incredible reach
 - Profound revenue opportunity



Lesson #1: World-Class Craftspeople

- New roles we've filled in last year by tapping into PC / console talent networks
 - Game Design
 - UI / UX
 - 3D Artists
 - VFX Artist
 - Art Director
 - Graphics Engineering
- Challenging transitions: Game Designers
- Simpler transitions: Artists



Lesson #1: World-Class Craftspeople

- Game design is a challenging transition
- New game design leader from CCP
- Controls and game operations are completely different
- Mobile has different design constraints
 - Less screen area for UI and controls
 - Network and connectivity considerations
 - Shorter average play sessions

Lesson #1: World-Class Craftspeople

- Art is an easier transition
- New 3D art leader from EA
- Similar production tools
- Early development stages (prototyping, creative vision, vertical slice) share similarities
- Goal is still to create beautiful graphics on a screen, albeit under different constraints

How We Changed Along the Way

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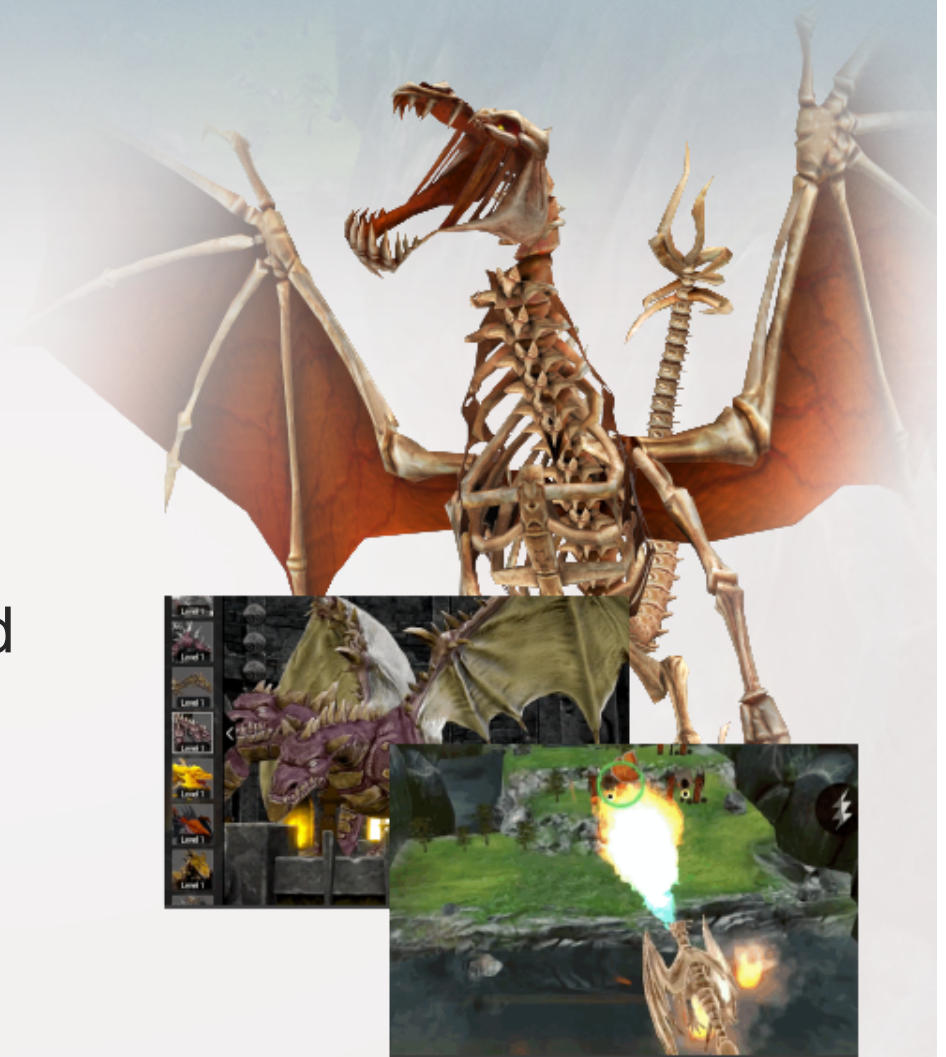
Historical Art and Polish on Mobile

- Devices were not extremely capable
- Performance and functionality were key



Lesson #2: Art Quality and Polish

- Players have higher art and polish expectations as time has passed
- Smartphone currently at the PS2 / Xbox graphics quality, but cycles are really fast and getting faster



Lesson #2: Art Quality and Polish

- Investing in technology is important
- Developed a game engine with a small memory footprint optimized for mobile devices
- Full native support for 3D graphics
- Leverages standard mobile development tools on iOS while still being cross-platform

How We Changed Along the Way

Best Practices from PC/Console Games

- Lesson #1: World-class craftspeople
- Lesson #2: Art quality and polish
- **Lesson #3: Prototype-driven development model**
- Lesson #4: Design vision

Historical Development Cycle Comparison

Mobile

- Historical mobile development cycle based on getting to market quickly
- Minimum viable product was a key tenet
- Months not years

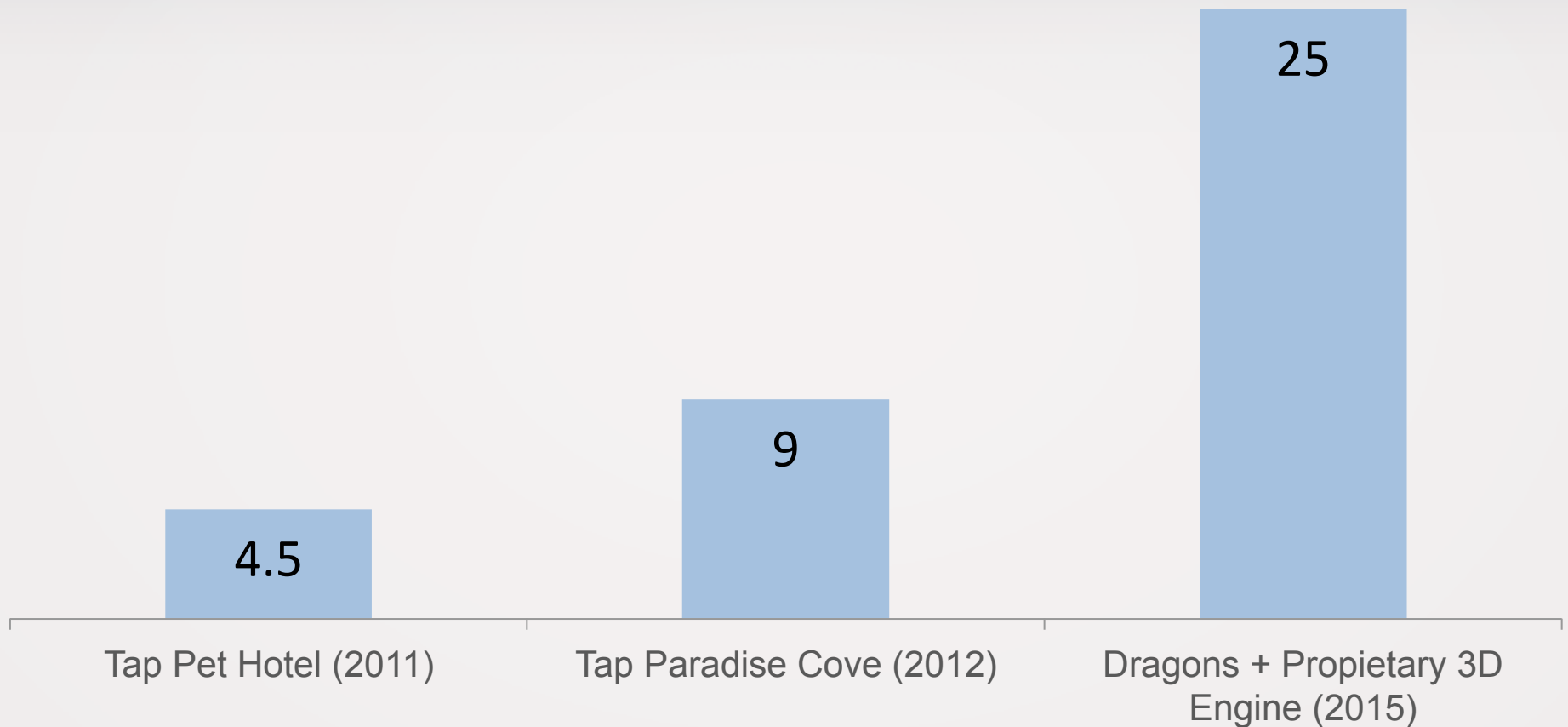
Historical Development Cycle Comparison

PC/Console

- PC/console development cycle based on getting to launch day with the highest quality product
- Deeper games require multiple creative cycles before launch
- PC/console developers kill more game concepts and concepts inside games
- Mobile today is becoming much more like pc/console

Historical Development Cycle Comparison

Development Time to Launch (Months)



Lesson #3: Prototype Driven Development

- Emphasis on finding the fun early and prototyping versus achieving early metrics
- Will require leadership and financial runway to allow for longer development cycles
- Spell towers in Dragons were a late-stage feature made possible with this approach



Lesson #3: Prototype Driven Development

- Current approach is all about speed AND depth
- Game ideas can come from anywhere in the company
- Pocket Gems today
 - Several teams that start small
 - Build detailed prototypes with rudimentary art
 - Focused on end-game replayability

Lesson #3: Prototype Driven Development

- Number of games we prototyped in:
 - 2013: 3
 - 2014: 18
- Number of prototypes we've killed
 - 2012: none
 - 2013: none
 - 2014: almost all



How We Changed Along the Way

Best Practices from PC/Console Games

- Lesson #1: World-class craftspeople
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- **Lesson #4: Design vision**

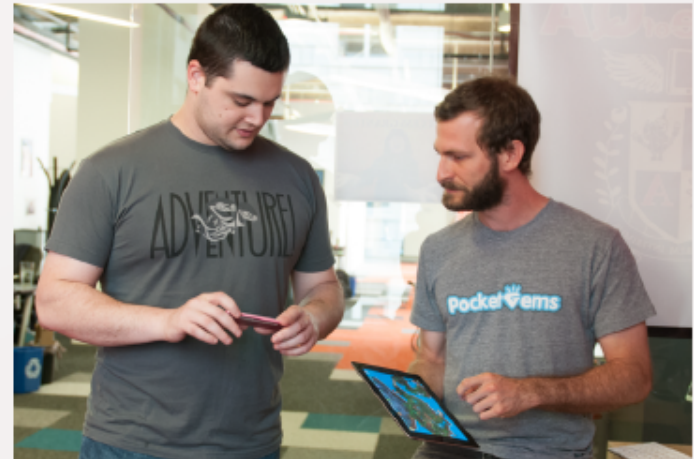
Historical Mobile Design Philosophy

- Traditionally, metrics like retention at days 1, 7, and 30 are used as a proxy to determine what players think is fun
- However, fun is subjective and data points like retention are imperfect measures



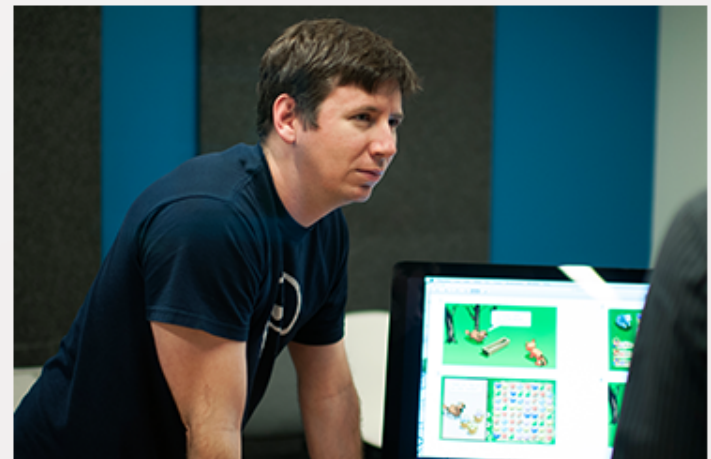
Lesson #4: Design Vision

- Longer cycles now require true design vision
- Critical to also adopt console practices in drawing feedback from more channels



Lesson #4: Design Vision

- New feedback channels to adopt from pc/console
 - Does the game team enjoy playing it?
 - Does the rest of the company enjoy playing it?
 - Do surveys tell you the game is enjoyable?
 - What do our most committed players think of the game?



Lesson #4: Design Vision

- Non-traditional data considered in Dragons
 - Spread of play testing within company
 - Closed beta net promoter score
 - Number of battles fought by top 1% and top 0.1% of players
 - Engagement in guild activities
- Healthy target metrics
 - Day 1 retention 50%
 - Day 30 retention 10+%
 - Conversion rate 10+%
 - Average session length 1+ hour



Lesson #4: Design Vision

- Design vision was necessary to see through disparate game systems needed to build a complete product
- Trust in design vision and launch games when it is carried out



Results

Results

- New strategies also influencing games currently in development and live games
- Tap Paradise Cove (Casual > PvP > Guilds)
- Deep rich games in prototyping / early production



Key Takeaways

- A. Tremendous opportunity to make first truly great games of mobile, but it will require adopting the best of both console and mobile
- B. Keep the purity of mobile games and practice of games as a service
- C. Critical to incorporate from pc/console best practices:
 - 1. World class craftspeople
 - 2. Art and polish
 - 3. Need to prototype up front and not be afraid to kill prototypes
 - 4. Design vision where fun must drive decisions

Questions?