Scoping Success
Rod Fergusson
Executive Producer, Epic Games, Inc.
About Me

- 10 years with Microsoft
  - Microsoft Consulting Services teaching Microsoft Solutions Framework
  - Transferred to Redmond to produce the next version
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- 6 years with Epic
  - Gears of War
  - Gears of War 2
  - Gears of War 3
How am I defining “Success”? 

- More than just quality
- More than just commercial
- It’s both, and...
- The team is happy!
Scope and Schedule

Scope

Schedule

Resources
Scoping

- Goal: Shipping the Right Product at the Right Time
  - Right Product = Quality
    - Consider your team - size, technology, and process
    - Consider player/industry expectations
  - Right Time = Timeliness
    - Consider window of opportunity
    - Consider marketing
Consider Your Team

- Lack of maturity will cost you time
  - Team, technology and process

- Scope should reflect design process
  - E.g. Epic is highly iterative so 33% buffer for Gears 3

- Scope should match quality expectations
  - E.g. Epic prefers smaller and polished
Consider Player/Industry Expectations

- You can’t scope in a vacuum
- What is the state of the art for your type of game?
- What would be considered the min bar for entry?
- How can you easily exceed expectations?
Managing Expectations with Scope

- Look beyond version 1 to allow for focus on the core
- Versioning allows you to react to
  - Player feedback
  - Industry trends
  - Competitive landscape
- There comes a point of diminishing returns
- Franchises are grown
- Gears 3 > Gears 1 + 5 more years of development
Consider Window of Opportunity

- When’s the best time to be on shelves?
- What is the competitive landscape?
- What else could be taking player’s money?
- Are there other initiatives you could piggy back on?
Consider Marketing

- Or why “It’ll ship when it’s done” doesn’t work anymore
- Marketing is a global, synchronized initiative
- Sales regions allocate their budgets and forecasts months in advance
- Buyers are looking 180 days out for what’s next
- It can take 14 weeks to get into a store flyer
Awesome Rod, but how?
Have a Fixed Ship Date Mindset

- The belief that the ship date is both realistic and unchangeable
  - Date can change but must be justified
  - Date not actually fixed till very confident
- Provides a clear goal for the team
- Forces prioritization and creativity
- Provides a decision-making constraint
Establish Your Pillars

- May be an aggregate set of features
- May be their own overall design goal
- Empowers scoping decisions
- Usually serves as great talking points for press
- Candidates for back of box features
Gears 3 Pillar Examples

- “We’re all Stranded now”
  - Collapse of society, low tech weapons, Savage Locust

- Accessibility
  - Team Death Match, greater situational awareness, simplification of game rules, tailored weapons

- Stickiness
  - Integrated level system, quantity-based matchmaking, player rewards and customization
Cut Early, Cut Often

- Due to unknowns, teams tend to underestimate effort
- Every feature takes polish time away from the other features
- Forget sunk cost, look at opportunity cost
- Always keep test & support burden in mind
- Test decisions against your pillars
It’s All About the Buffer

- Realistic scope ≠ the collection of known tasks
- Recognition that the future is uncertain
- The longer the duration, the greater the uncertainty
- The more uncertainty and risk, the more buffer
- Polish time is not buffer time
Estimating

- Top-down scheduling provides constraint
- Bottom-up estimating enables ownership
- Group estimating creates accountability
- Always track your actuals
- Evidence-based scheduling provides history
- Find the right granularity
Gears 2 New, Better, More Process

- Canvassed the team for ideas
- Looked across 16 different project areas
- Met with area stakeholders to determine a top 5 for each
- Leads then voted on all of those possible features
- Features stack ranked to determine priorities
- Ensured we were working on the most important things first
# Example Gears 2 NBM Results

<table>
<thead>
<tr>
<th>Category</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>MORE</td>
<td>Living Battlefield Moments</td>
</tr>
<tr>
<td>NEW</td>
<td>MP Bots</td>
</tr>
<tr>
<td>BETTER</td>
<td>Hit Reactions</td>
</tr>
<tr>
<td>MORE</td>
<td>Destructibles</td>
</tr>
<tr>
<td>NEW</td>
<td>Huge Scale Creatures</td>
</tr>
<tr>
<td>MORE</td>
<td>Locust Variations</td>
</tr>
<tr>
<td>NEW</td>
<td>Meat Shield</td>
</tr>
<tr>
<td>BETTER</td>
<td>Cover Controls</td>
</tr>
<tr>
<td>NEW</td>
<td>Party System</td>
</tr>
<tr>
<td>NEW</td>
<td>Combat Trials Mode (Horde)</td>
</tr>
</tbody>
</table>
Gears 3 NiMBLe Process

- New, More, Better, \textit{Less}
- Recognized that there were things that we also wanted to reduce in our game
- Starcraft 2 didn’t increase number of units
- Followed up with a “why was this rated low” meeting
## Example Gears 3 NMBL Results

<table>
<thead>
<tr>
<th>Area</th>
<th>Category</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>MP</td>
<td>New</td>
<td>Vanity unlockables</td>
</tr>
<tr>
<td>ANIMATION</td>
<td>New</td>
<td>Custom animations per character</td>
</tr>
<tr>
<td>CO-OP</td>
<td>More</td>
<td>Co-Op Buddy Interactivity</td>
</tr>
<tr>
<td>COMMUNITY</td>
<td>More</td>
<td>Player stats for MP and SP</td>
</tr>
<tr>
<td>MP</td>
<td>Better</td>
<td>MP matchmaking and party experience</td>
</tr>
<tr>
<td>GAMEPLAY</td>
<td>Better</td>
<td>Boss Battles</td>
</tr>
<tr>
<td>ANIMATION</td>
<td>Better</td>
<td>Non-combat and ambient idles</td>
</tr>
<tr>
<td>ENGINE</td>
<td>Better</td>
<td>Shadows and Lighting</td>
</tr>
<tr>
<td>AUDIO</td>
<td>Better</td>
<td>Audio Balancing game-wide (Ducking)</td>
</tr>
<tr>
<td>LEVEL</td>
<td>Less</td>
<td>Long combat distances</td>
</tr>
</tbody>
</table>
In Conclusion

- It takes more than just quality to be a successful game, it takes a window of opportunity and strong marketing support.
- Scope based on your team, on player/industry expectations and your ideal schedule.
- Realistic and constant scoping, along with buffer, allows you to keep a more predictable schedule.
- A predictable schedule allows you to hit your window of opportunity and receive the full benefit of marketing.
- In other words...
Ship the right product at the right time!
Questions?
A Must Read and Watch
“Dynamics of Software Development”
By Jim McCarthy

ISBN: 0735623198
p.s. Epic is hiring in North Carolina, Utah & Warsaw :-)  

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