





Agile Game Development

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An introduction to applying agile methodology to game development

- History of agile at High Moon
- What is *agile*? Why use it?
- Overview of *Scrum*, one agile methodology
- Agile Planning
- The results of using agile at High Moon
- Q&A

This is about what we experienced, not the "Right Way" to make games.

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History of Agile at High Moon

- Used Scrum in last year of Darkwatch
 - Helped keep the project on track
- Adopted XP and agile planning practices on new projects over the last two years



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What is agile?

- It's a method for developing products using short iterations
 - Each iteration is like a short project in itself
 - Uses "inspect and adapt" practices to adjust the project plan.

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Why Adopt Agile?

The Reasons/Goals:

- Reduce wasted effort/crunch
- To find the fun first

Other industries have used agile to develop better products faster. Can we?

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The Agile Manifesto (for GD)

People and communication	over	Process and Tools
Working game	over	Design documentation
Customer collaboration	over	Contract negotiation
Responding to change	over	Following a plan

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Wasted Effort Can Come From "uncertainty" ...and it influences what methodology we use

Source: Strategic Management and Organizational Design by Ralph Stacey in Agile Software Development with Scrum by Ken Schwaber and Mike Beale.

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Finding the Fun First

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What is Scrum?

- People and communication
- Working game
- Customer collaboration
- Responding to change

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What is Scrum?

- Iterative
- Results oriented
- Collaborative
- Self disciplined
- Commitment oriented

- Not plan based
- Not management based

About making things visible so you can apply common sense

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The Scrum Cast

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Product Backlog

Product Backlog as prioritized by Product Owner
 Defined as *User Stories* with conditions of satisfaction
 Estimated with relative *User Story Points* that help track progress

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Sprints (Iteration)

Change
 Sprint Goals
 Sprint Backlog broken out by team
 Sprint (Fixed Duration)
 Game
 New Game (Vertical Slice Added)

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Review and Planning

Jump
 Fly
 Run
 Game
 Review and Planning

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Daily Scrum

Jump
 Fly
 Crouch
 Run
 Game
 Daily Scrum

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The War Room

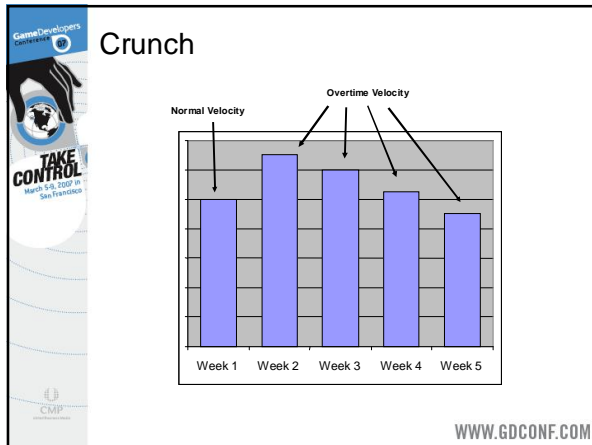
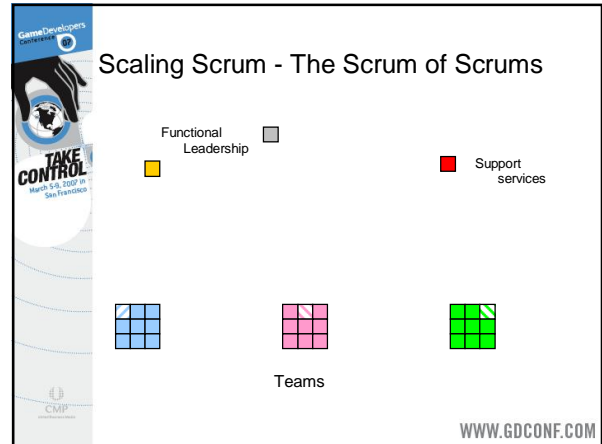
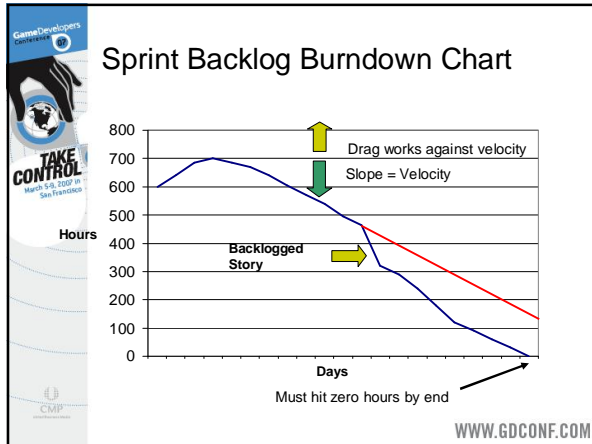
User Stories
 Tasks
 Completed Tasks
 Burndown Chart

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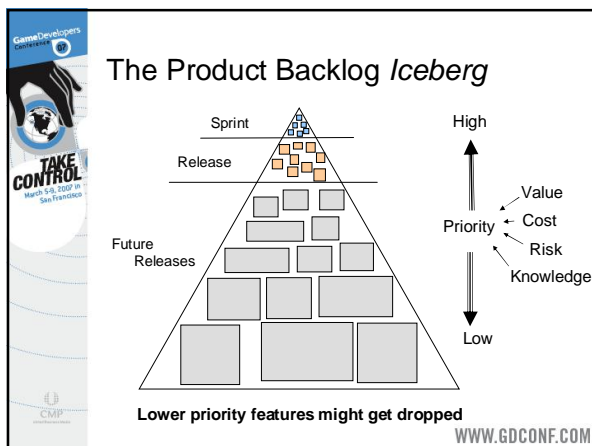
Jump User Story

Task	Mon.	Tues.	Wed.	Thurs.
Jump Input Control	8	3	0	0
Jump Tuning	16	16	10	4
Jump Animation	8	16	16	4
New task		8	8	0

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- ### Agile Game Development
- Starting agile.
 - Benefits
 - Issues
 - Where to go for more info?
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- ### Benefits
- Improved...
 - Productivity
 - Especially for leads
 - Reliability of build
 - Quality of game
 - Morale
 - Ownership
 - Team work
 - Communication
 - Enables low-cost executive awareness
 - Which means you don't have to work hard to find out what's going on
 - Makes us constantly see and think about what we are doing. Encourages common sense.
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Not there yet...

- Production is not agile
 - Minimum content required
- Large teams need more leadership
 - Self-organization breaks down
- Vertical slices are hard
 - Debt can sneak in
 - Releases can be mini-waterfalls
 - These cause crunch






Starting agile








Where to go for more info?

- www.agilegamedevelopment.com
 - Books
 - Mailing lists – For Game Developers to share info on adopting Agile
 - AGD Blog – Addressing challenges and news on adopting Agile to Game Development




Questions?